

Annual Report 1985

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## Agenda

Agenda of the Annual Meeting of Stockholders to be held in Musis Sacrum, Velperplein, Arnhem, the Netherlands, on Wednesday, April 23, 1986, at 2:30 p.m.

- 1 Opening
- 2 Report of the Board of Management for the fiscal year 1985
- 3 Approval of the financial statements; consideration of the dividend proposal
- 4 Determination of the number of members of the Supervisory Council; appointment of members of the Supervisory Council
- 5 Proposal to designate the Board of Management as entitled to issue shares and to restrict or disregard the preemptive rights of stockholders
- 6 Proposal to authorize the Board of Management to acquire shares in the Company on behalf of the Company
- 7 Any other business

### Translation.

In the event of a conflict in interpretation, reference should be made to the Dutch version of this Annual Report.

The symbol ® indicates trademarks registered in one or more countries.



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## President's Letter

1985 was another good year for the Group. The return on invested capital was up to 20.9%, and the return on stockholders' equity stood at 20.7%. These good results are largely the outcome of years of sustained effort to improve our product mix. In the seventies, such improvements were primarily based on restructuring moves and the discontinuation of weak products. Lately, however, the situation has profoundly changed. With earnings up for several years in succession, the Group is now in a position to pursue a more aggressive strategy. Key elements in that strategy include the reinforcement of our existing product range through the addition of high-value-added products and the development of new activities that draw upon our technological and commercial know-how. At the same time we are endeavoring to preserve the health of our commodity-type products.

How this strategy shapes our destiny is illustrated by the following facts. Capital investments were up 29% from 1984, rising to a total of Hfl 1 billion. In the next few years we will continue such investments at an annual rate of at least this order of magnitude.

Research expenditures, both for process and product improvement and for the development of new, high-value-added products, increased 14% to a total of Hfl 725 million. Further increases are projected for the coming years.

Acquisitions were high on our list of priorities. Take-over candidates were consistently subjected to critical appraisal as to price and quality.

Among the most successful of our take-overs was the acquisition of two diagnostics companies in the United States. Our coatings position in Europe was bolstered by the acquisition of two companies with established interests in Belgium and the United Kingdom. Just before the end of the year, we expanded our Scandinavian position through the acquisition of a Danish specialty foods company.

At the same time we continued to divest activities which are of declining strategic importance. The prime example was the sale of our U.S. fiber operations. This reduced the American share of our total invested capital to 15%. We are committed to restoring this share to at least 20% in the very near term, both by further acquisitions and by direct capital expenditures.

Early in 1986 we acquired a major U.S.-based reinforced engineering plastics company.

The United States, however, is not the exclusive focus of our attention. Major investments were also made in Europe, particularly in the Netherlands and the Federal Republic of



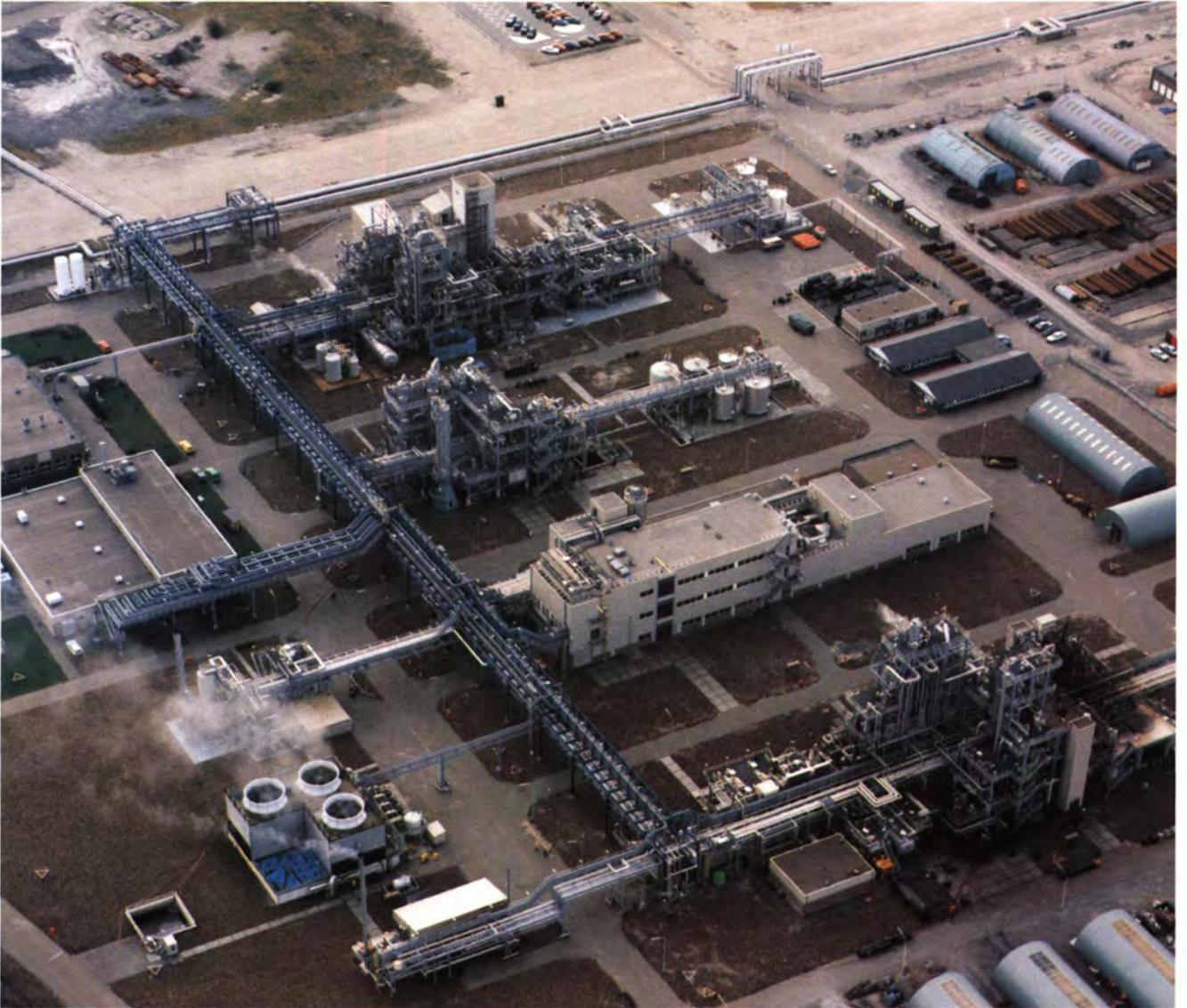
Germany, where a drastic modernization of the polyester filament and staple manufacturing facilities is being undertaken. In addition, construction of the aramid and carbon fiber production plants was completed, as was the modernization of the soda ash plant.

In the Republic of Korea we set up an Akzo office to boost expansion of our interests in that country.

We encouraged all the divisions to combine their decentralized responsibility with a regard for the larger Group interest. It is gratifying to note that this policy is beginning to pay dividends at various levels in the organization.

Step by step the character of Akzo is changing. In the past two years the Group no doubt benefited from the high rate of the dollar. The flexibility this afforded us was employed to increase our resilience. This fact reinforces my confidence, as already expressed in the 1984 report, that even if the business climate deteriorates, the Group will still be able to turn in an acceptable performance.

A.A. Loudon



*At Delfzijl the raw materials and the polymer for our aramid fibers will be made.*

## Financial Highlights

|  | 1985   | 1984   | change | 3 |
|--|--------|--------|--------|---|
| <b>Millions of guilders</b>                        |        |        |        |   |
| Net sales  | 18,010 | 16,520 | + 9%   |   |
| Operating income                                   | 1,465  | 1,340  | + 9%   |   |
| Net income   | 843    | 752    | + 12%  |   |
| Common stock                                       | 796    | 789    | + 1%   |   |
| Stockholders' equity                               | 4,142  | 4,014  | + 3%   |   |
| <b>Property, plant and equipment</b>               |        |        |        |   |
| Expenditures                                       | 1,008  | 784    | + 29%  |   |
| Depreciation                                       | 608    | 576    | + 6%   |   |
| <b>Per common share of Hfl 20, in guilders</b>     |        |        |        |   |
| Net income   | 21.21  | 19.06  | + 11%  |   |
| Dividend   | 6.60   | 6.00   | + 10%  |   |
| Stockholders' equity                               | 104.16 | 101.80 | + 2%   |   |
| <b>Key financial statistics</b>                    |        |        |        |   |
| Operating income, as % of net sales                | 8.1    | 8.1    |        |   |
| Operating income, as % of average invested capital | 20.9   | 19.3   |        |   |
| Net income, as % of average stockholders' equity   | 20.7   | 21.5   |        |   |
| Number of employees at year-end                    | 65,000 | 66,100 |        |   |

### Akzo

Akzo is an international group of companies with 225 operations in 50 countries.

Akzo's product range includes man-made fibers, salt, commodity and specialty chemicals, coatings, pharmaceuticals and diagnostics, consumer products, machinery, engineering plastics, membranes, and miscellaneous industrial products.

Akzo's worldwide business activities are organized in the Enka, Akzo Zout Chemie, Akzo Chemie, Akzo Coatings, Akzo Pharma, and Akzo Consumenten Produkten divisions, while its interests in the United States and Canada are integrated in Akzo America Inc.

In the Netherlands, Belgium, and Brazil, Akzo has central organizations which have a coordinating function or render services to local Akzo companies.

Akzo produces and markets a varied range of products for industrial and consumer use. In its efforts to improve and expand this range, the Group focuses on high-technology and marketing-intensive products with attractive growth potential.

Geographically, Group operations are largely concentrated in the Netherlands and the Federal Republic of Germany. More than 60% of invested capital and manpower is employed in these two countries.

Expansion of the Group's position in North America is given a high priority, with high-tech products at the top of the list.

# Supervisory Council and Board of Management

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## 4 **Supervisory Council**

G. Kraijenhoff, Chairman  
A. Herrhausen, Deputy Chairman  
E.G.G. Werner, Deputy Chairman  
A. Batenburg  
A.G. van den Bos  
F.H. Fentener van Vlissingen  
H.J. Schlange-Schöningen  
H.A. van Stiphout  
C. van Veen  
O. Wolff von Amerongen

### **Board of Management**

A.A. Loudon, President  
J. Veldman  
H.J.J. van der Werf  
H.G. Zempelín

Adviser: W.K.N. Schmelzer

### **Secretary**

J.P. Huges

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### **Management Committee**

In addition to the members of the Board of Management,  
the Management Committee includes:

S. Bergsma  
G.J. Coli  
F.A.G. Collot d'Escury  
M.W. Geerlings  
J.R. Hutter  
H.B. Jacobs  
A.G.J. Vermeeren  
M.D. Westermann  
C. Zaal

# Report of the Supervisory Council

## Changes in the Supervisory Council

At the Annual Meeting of Stockholders held on April 25, 1985, J.R.M. van den Brink and S.C. Bakkenist resigned from the Council, both having reached the mandatory retirement age. C.S. Ramsey stepped down because his term of office had expired. He did not stand for reelection.

At the Annual Meeting of Stockholders on April 23, 1986, A.G. van den Bos and H.A. van Stiphout will step down because their terms of office are expiring. They are willing to serve another term, and we recommend that they be reappointed.

At the same meeting H.J. Schlange-Schöningen will resign from the Council, having reached the mandatory retirement age. Mr. Schlange-Schöningen entered the employ of the then Vereinigte Glanzstoff Fabriken in 1950. He went on to become a Member (1971) and a Deputy President (1972) of the Akzo Board of Management, with special responsibility for the internationalization of Akzo's operations and for the coordination of the Company's worldwide man-made fiber interests. Since 1978 our Council has had the benefit of his considerable international experience. We are indebted to Mr. Schlange-Schöningen for the important contributions he made to the global expansion of the Group.

Because the resulting vacancy will not be filled for the time being, the stockholders will be asked to fix the number of members of the Council at 9.

Having reached the retirement age, W.K.N. Schmelzer will resign as adviser to the Board of Management with effect from June 1, 1986. For more than 10 years he has made major inspiring contributions to the Board's decision-making in relation to international affairs and issues of a general social nature. Our Council also frequently sought Mr. Schmelzer's expert advice.

## Supervision

The Council regularly received reports on the business of the Company. We periodically consulted with the Board of Management on the steps and activities the Board deemed necessary to give effect to corporate strategy. We are pleased to record here that the conduct of affairs in 1985 has produced a further structural improvement in the Group's business, and for this we thank both the Board of Management and the Company's employees.

We herewith submit to you for approval at the Annual Meeting of April 23, 1986, the financial statements for 1985 as prepared by the Board of Management. These financial statements have been examined by KMG Klynveld Kraayenhof & Co., *Registeraccountants*. Their report appears on page 60.

We have approved these financial statements and the Board of Management's proposal made therein with regard to the allocation of profit. Acceptance of this proposal by stockholders means that the 1985 dividend will be fixed at Hfl 6.60 per common share of Hfl 20, of which Hfl 1.50 was declared and made payable as an interim dividend in November 1985.

We recommend that you also approve the financial statements, thus discharging the responsibility of the members of the Board of Management for their conduct of the business and of the members of the Supervisory Council for their supervision.

Arnhem, March 7, 1986

For the Supervisory Council

G. Kraijenhoff  
Chairman

# Report of the Board of Management

## The Year in Review

### 6 General

#### Continued Earnings Gain

The year 1985 closed with a gratifying net income of Hfl 843 million, 12% higher than the 1984 figure. Due in part to acquisitions, net sales were Hfl 1.5 billion higher than in 1984 and reached the Hfl 18 billion mark.

By and large the factors leading to the year's successful performance were the same as those prevailing in 1984. The continued development toward a more attractive composition of the product mix is structural in nature. The propitious business climate and the high average rate of the U.S. dollar over the year helped keep production and sales high or pushed their growth to a high level, with selling prices going up in many cases.

A further drop in inflation, wage moderation, measures to stimulate productivity, and capital investments together produced comparative stability of costs.

The tax burden increased from 35% to 36%, but financing charges were down by 35%.

#### Dividend Proposal

Expressed in guilders per common share of Hfl 20, net income advanced from Hfl 19.06 in 1984 to Hfl 21.21 in 1985, while common stock increased to approximately Hfl 796 million. The corresponding figures on a current-value basis are Hfl 16.36 in 1984 and Hfl 18.49 in 1985.

We will propose to the Annual Meeting of Stockholders that the 1985 dividend be fixed at Hfl 6.60 per common share of Hfl 20. Of this amount, Hfl 1.50 was declared as an interim dividend in November 1985.

If this proposal is adopted, Hfl 262 million will be distributed, and Hfl 581 million will be retained.

#### High Level of Capital Investment

One indication of the current phase of rapid growth of the Akzo Group is the high level of capital expenditures and acquisitions, the total in 1985 having reached a peak of Hfl 1.4 billion (1984: Hfl 0.9 billion).

Expenditures of Hfl 1.0 billion for property, plant and equipment were significantly in excess of depreciation, on the basis of both cost (Hfl 0.6 billion) and current value (Hfl 0.7 billion). Authorizations were up from more than Hfl 1.0 billion in 1984 to almost Hfl 1.3 billion in 1985.

Acquisitions (Hfl 0.4 billion) mainly related to two U.S.-based diagnostics companies (Litton Bionetics and the diagnostics operations of Warner Lambert) and the Belgian coatings company Levis, in which we acquired an interest of 68% (increased to 100% early in 1986).

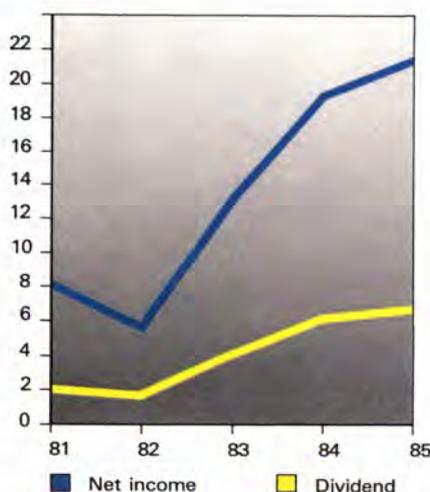
Against this, there were divestments in the aggregate amount of Hfl 0.8 billion, compared with a negligible amount in 1984. The principal items concerned the sale of the fiber producer American Enka to BASF Corporation and the sale of a 49% interest in Akzo Consumenten Produkten to Shell.

Capital investments by the nonconsolidated companies aggregated Hfl 0.5 billion in 1985 (1984: Hfl 0.4 billion); total sales amounted to Hfl 3.3 billion.

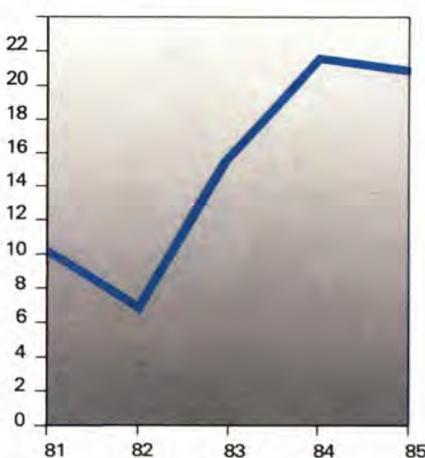
#### Sound Financial Position

The year saw a further improvement in the equity/debt

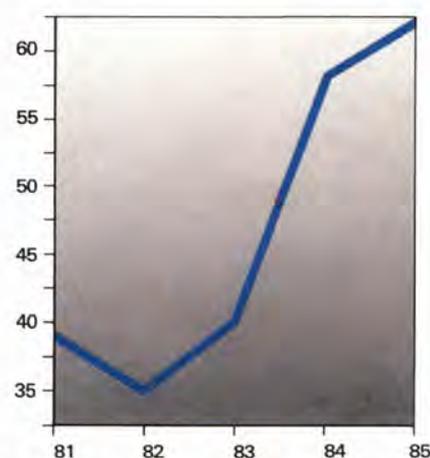
Net income and dividend per common share of Hfl 20, in guilders



Net income as percentage of average stockholders' equity



Group equity as percentage of debt



ratio, from 0.58 to 0.62 at December 31, 1985. At Hfl 1.5 billion, cash and short-term investments remained at a high level. Together with the amount of unused medium- and long-term credit facilities (Hfl 0.7 billion), we are able to maintain a firm base for the financing of the planned development of the Group.

**Economic Climate**

Business conditions continued satisfactory in 1985, even if the growth rate of the economy in Western Europe was limited to about 2.5%. Growth of the U.S. economy, which had shown considerably higher rates for a number of years due to an expansive spending policy of the U.S. government, fell to about the same level.

The decline in the value of the U.S. dollar against other currencies did not yet have an appreciable effect on international trade in 1985. The concomitant strengthening of the competitive position of U.S. industry may reduce the domestic demands for protectionist measures.

The Western European textile industry was seriously affected in terms of capital losses and unemployment when in the seventies imports began flooding the market. Under the umbrella of the Multi-Fiber Agreement, which moderated imports, the textile industry has managed over the years to change from labor-intensive to capital-intensive production processes, with products especially aimed at the upper end of the market. The process of restructuring and reorientation is now largely completed. As for productivity, the European textile industry is internationally competitive again. This, however, is not yet the case for the clothing industry. A return to free trading relations on the basis of reciprocity and with due observance of the GATT rules appears to be on the horizon. This is a gratifying development, but for the time being a new Multi-Fiber Agreement is indispensable as a channel for this process of gradual liberalization.

**Preparing for the Nineties**

In order to accomplish its growth objectives Akzo concentrates on high-value-added and marketing-intensive products. In doing so, however, we do not neglect our comparatively large interests in commodity chemicals and traditional man-made fibers. We are determined to strengthen the competitive position of these cash generators by such means as process improvement, energy conservation, and automation. Enhancement of product quality will often be an additional benefit of such efforts.

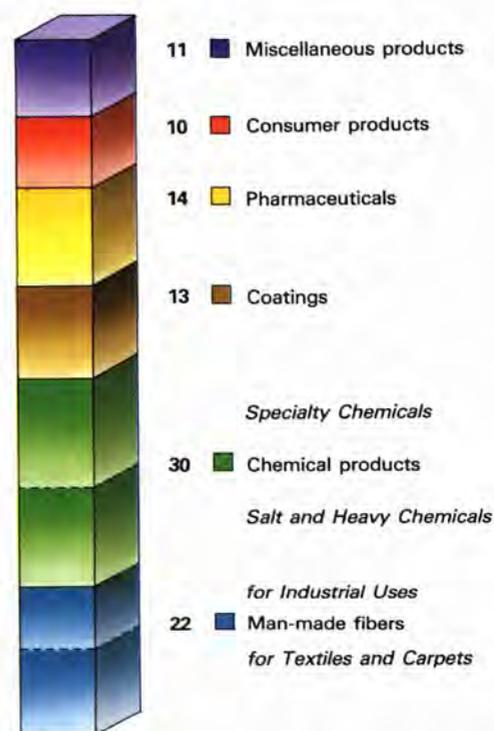
Group growth, however, is particularly dependent on specialties, with products in the field of polymer chemistry, pharmaceuticals, and diagnostics among the most promising ones. Because of the advanced nature of the technologies in these product areas, the development of

products and applications requires substantial investment in know-how, production, marketing, and human resources. The internal generation of new, specialized know-how and the adaptation of existing markets or the development of new ones take time, although the pace of change can be accelerated through the purchase of knowledge and experience, or through cooperation with third parties.

Prominent among the areas of concentration are new structural composites, which will lead to innovations in industries such as aerospace, in terms of the materials employed. In its *Twaron*<sup>®</sup> aramid, its *Tenax*<sup>®</sup> carbon, and its glass fibers, the Group has available a range of reinforcing materials which, when combined with plastics, metals, and concrete, will result in major innovative composites. Silica fibers are currently under development.

For these materials to live up to their promise, however, it is vital that we obtain supplementary know-how in the fields of technology and marketing—all the way down to the final consumer of new, strong materials. We regard the

*Product mix (as %)*



Basis:  
1985 net sales less sales of divested companies and including annualized sales of companies acquired during the year.

8 acquisition in early 1986 of Wilson-Fiberfil International, a producer of engineering plastics, as an important step in this direction.

With the acquisition of the two diagnostics companies in the United States, we made useful additions to our product range and achieved a major expansion of our research capabilities. Of great value to our operations is the know-how of Litton Bionetics in the field of biotechnology.

Annualized sales of the two diagnostics companies and the plastics company aggregate U.S.\$ 190 million. This is approximately 44% of the sales of American Enka, which was divested at the end of the year.

Akzo Coatings achieved a better balanced geographic position in the Common Market through the acquisition of two coatings companies, Levis (Belgium) and Blundell-Permoglaze Holdings (United Kingdom). The latter company was acquired early in 1986. Market penetration of our car refinishes in the U.S. is proceeding at a satisfactory rate. We are continuing the endeavors to strengthen our position in automotive finishes.

For Akzo Consumenten Produkten 1985 was highlighted by the integration of the Temana companies. The division will continue to concentrate on developing a more balanced geographic distribution of its activities. The commitment to greater geographic diversification is reflected in the acquisition of a Danish specialty foods company (Heidelberg Food) at the end of 1985.

If we are to attain our objectives for the nineties we need to develop the appropriate technologies. The part our R&D organization plays in this regard is discussed more fully on pages 12 and 13. Suffice it here to observe that, to increase the pace and depth of technological innovation, notably in high-value products, we are in favor of closer cooperation with academic research institutes and with the research units of companies interested in similar products and/or applications.

We therefore applaud European initiatives seeking to effectuate such cooperation. Projects of significance to us concern such topics as structural composites, biotechnology, and membrane technology.

#### Outlook for 1986

We are confident that the Group will be able to achieve 1986 earnings which can compare with the excellent 1985 results.

This confidence is largely based on the Group's healthy position, in terms of both financial resources and product mix, which has increased its ability to confront adversity.

Even so, our projection is conditional upon the continuance of the present favorable economic climate.

The future movements in the rate of the dollar are uncertain. The current rate of exchange at least presages intensified competition in international markets with regard to certain of the Group's chemical products and fibers. For our consumer-oriented product classes we anticipate on the whole a continuation of the positive trend seen in 1985.

*Bionetics Research Inc., of Rockville, Maryland, specializes in modern biotechnology. Its activities, which comprise both captive*

*and contract research, constitute an important addition to the research programs of Akzo Pharma.*



## Results of Operations

### Condensed Statement of Income

| Millions of guilders                    | 1985     | 1984     |
|---|----------|----------|
| Net sales                               | 18,010   | 16,520   |
| Operating costs                         | (16,545) | (15,180) |
| Operating income                        | 1,465    | 1,340    |
| Financing charges                       | (185)    | (285)    |
| Taxes on operating income               |          |          |
| less financing charges                  | (465)    | (369)    |
| Earnings from nonconsolidated companies | 98       | 123      |
| Extraordinary items after taxes         | 3        | (35)     |
| Group income                            | 916      | 774      |
| Minority interest                       | (73)     | (22)     |
| Net income                              | 843      | 752      |

#### Current-value information

|                  |       |       |
|------------------|-------|-------|
| Operating income | 1,289 | 1,145 |
| Net income       | 735   | 645   |

#### Sales

The increase in net sales by Hfl 1.5 billion (9%) trailed last year's increase (10%). All product groups contributed to the increase, particularly man-made fibers (Enka Europe), pharmaceuticals and diagnostics, and consumer products, which between them accounted for more than half of the rise in sales. Another factor contributing to the increase was the acquisitions made in the last two product sectors.

The sales gain is attributable to volume growth (3 points), higher selling prices including currency translation differences (3 points), and acquisitions net of divestitures (3 points).

#### Operating Costs

As a percentage, the increase in operating costs equaled the increase in net sales. Consequently operating income expressed as a percentage of sales remained on a par with the prior year's level (8.1%).

Labor costs were up 8%, due to an increase in the average size of the labor force and the higher cost per employee. Expressed as a percentage of sales, labor costs decreased 0.2% to 25.8%.

Compared with the rise in sales, raw material and energy costs showed a less than proportionate increase, at 43% of sales against 44% in 1984.

#### Financing Charges

Financing charges were down 35% to Hfl 185 million, largely as a result of a reduction in the aggregate amount of interest-bearing borrowings.

#### Taxes

The tax burden increased from 35% to more than 36%.

The effect of loss carryforwards on the tax burden is relatively minor now.

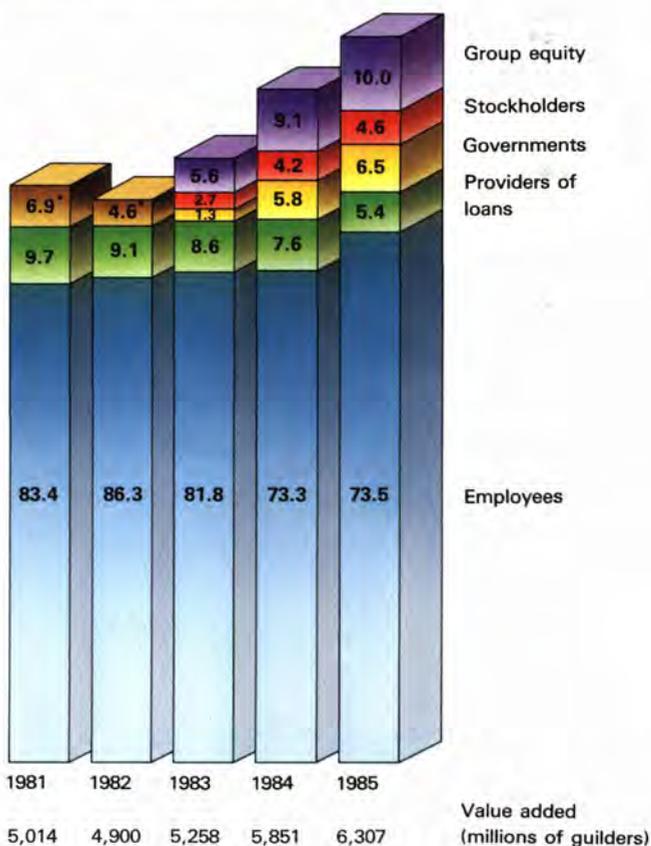
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#### Earnings from Nonconsolidated Companies

Earnings were down to Hfl 98 million (1984: Hfl 123 million), mainly due to lower income from the methanol plants caused by feedstock price rises. A healthy performance was turned in by the man-made fiber companies in Latin America and India. Century Enka (India) in particular enjoyed excellent results.

Akzo Chemie's joint ventures Silenka (glass fibers) and the Japanese-based company Lion Akzo (fatty amines) posted substantial gains in earnings.

#### Shares in value added (as %)



\* Group equity, stockholders, governments

Following a change in practice, added value now includes the balance of extraordinary items.

10 *Extraordinary Items after Taxes*

Extraordinary items showed a positive balance of Hfl 3 million. Extraordinary gains relating to the divestiture of interests were largely offset by extraordinary losses due to several provisions.

*Net Income on the Basis of Current Value*

Net income on the basis of current value rose from Hfl 645 million in 1984 to Hfl 735 million in 1985.

Due in part to declining prices in the second half of 1985, the effect of price rises on depreciation and inventories consumed did not differ materially from that in the previous year.

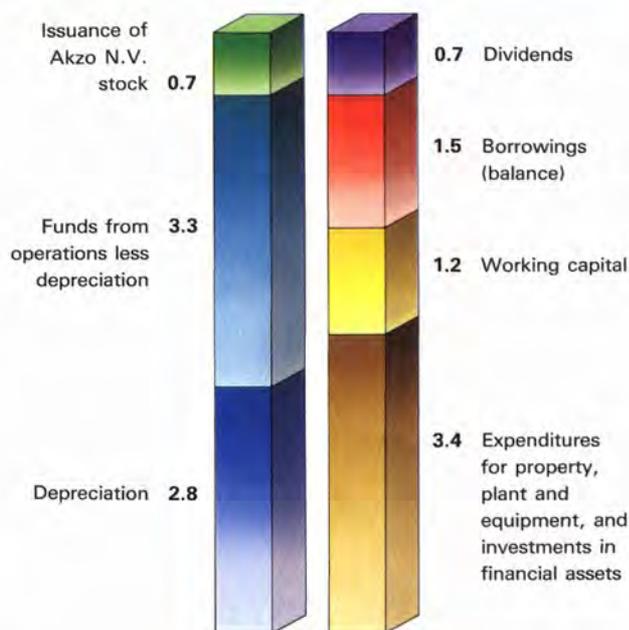
**Financing and Capital Investments**

The summary statement given below shows the sources and applications of funds, supplemented with proceeds from and expenditures for financial operations, on balance resulting in a change in cash and short-term investments.

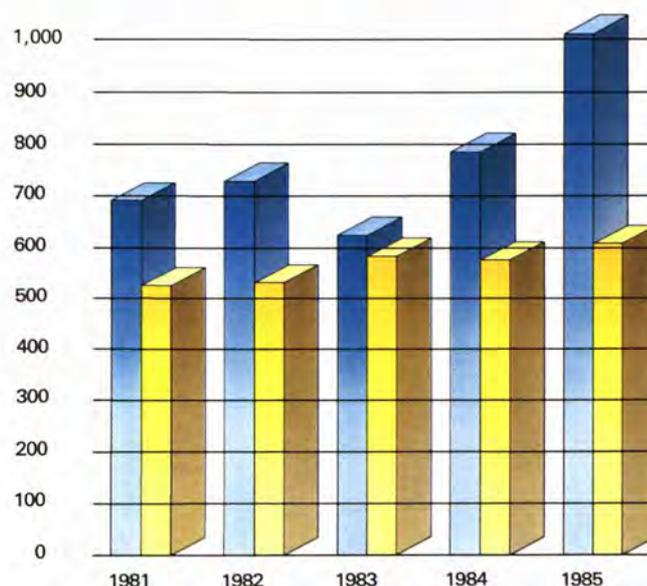
| Millions of guilders                           | 1985         | 1984         |
|--|--------------|--------------|
| <i>Sources of funds</i>                        |              |              |
| Group income                                   | 916          | 774          |
| Depreciation                                   | 608          | 576          |
| Other sources                                  | 199          | 236          |
|  | <u>1,723</u> | <u>1,586</u> |
| <i>Applications of funds</i>                   |              |              |
| Investments                                    | 1,430        | 887          |
| Disposal of interests                          | (789)        | (25)         |
|  | 641          | 862          |
| Increase in working capital                    | 197          | 157          |
| Dividends paid                                 | 259          | 163          |
| Other applications                             | 18           | —            |
|  | <u>1,115</u> | <u>1,182</u> |
| Surplus  | 608          | 404          |
| Issuance of stock and drawdowns, etc.          | 572          | 814          |
| Repayment of borrowings, etc.                  | (762)        | (1,357)      |
|  | (190)        | (543)        |
| Change in cash and short-term investments      | 418          | (139)        |
| Cash and short-term investments at December 31 | 1,485        | 1,067        |

The Group's financing picture was characterized by a substantial rise in capital expenditures and acquisitions, and by the high amount for disposal of interests, principally the

*Sources and applications of funds, 1981-1985 (billions of guilders)*



*Expenditures for property, plant and equipment and depreciation (millions of guilders)*



proceeds of the sale of American Enka to BASF Corporation and the sale of the 49% interest in Akzo Consumenten Produkten to Shell.

Cash and short-term investments were up approximately 40% to Hfl 1.5 billion at year-end.

### Capital Investments

Capital investments, which aggregated Hfl 1.4 billion in 1985, break down into expenditures for property, plant and equipment (Hfl 1.0 billion) and for acquisitions (Hfl 0.4 billion).

Expenditures for property, plant and equipment rose by one third over 1984. Chemical products and man-made fibers accounted for the lion's share in this increase. In 1985, 68% of the outlays went to these product groups.

Capital expenditures in the sector of chemical products (Hfl 396 million) were equally shared by Akzo Zout Chemie (including International Salt) and Akzo Chemie. The large expenditures for Akzo Chemie mainly related to expansion in the North American market, notably in the area of cracking catalysts.

In the man-made fibers product group, capital expenditures for Enka and American Enka were mainly focused on modernization, in particular for Enka's industrial fibers and polyester textile fibers.

For the other product groups combined, a lower increase in expenditures was registered, although Akzo Coatings notably showed a significant rise. Expansion of these product groups was chiefly realized by acquisitions in the aggregate amount of Hfl 0.4 billion. These acquisitions included Litton Bionetics and the diagnostics division of Warner Lambert by Akzo Pharma, Levis by Akzo Coatings, and the Heidelberg foods company by Akzo Consumenten Produkten.

The total amount of project authorizations in 1985 reached a level of almost Hfl 1.3 billion (1984: more than Hfl 1 billion). Significant increases were recorded for Enka (fibers and nonfibers), Akzo Chemie (specialty chemicals), and Akzo Pharma (pharmaceuticals and diagnostics).

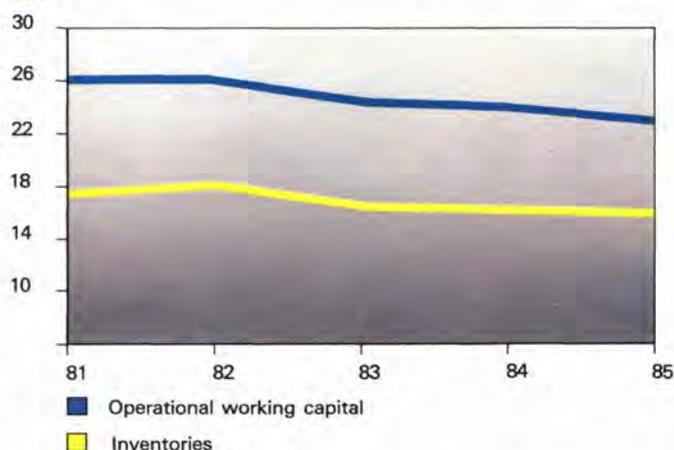
### Capital Expenditures in 1986

Expenditures for property, plant and equipment are expected to show a further rise in 1986; the project authorizations total is not likely to exceed the 1985 amount.

### Working Capital

Operational working capital (inventories and trade receivables, less accounts payable) expressed as a percentage of net sales again showed a decrease.

*Operational working capital and inventories as percentage of net sales*



### Interest-Bearing Borrowings

Early in 1985, we issued 7% Hfl 150 million Euronotes with a life of five years. The proceeds thus obtained were used for accelerated repayment of the 9% DM 125 million debentures.

On balance, the aggregate amount of interest-bearing borrowings was further reduced in 1985. The average rate of interest on loans outstanding at year-end decreased from 8.8% to 8.4%.

In 1985, 11,070 convertible 4¾% U.S. dollar debentures were offered for conversion, resulting in the issuance of 327,438 common shares of Hfl 20.

The strengthening of Group equity and the reduction of debt resulted in a further improvement in the Group equity/debt ratio from 0.58 at the end of 1984 to 0.62 at the end of 1985.

### Long-Term Credit Facilities

An agreement was concluded with a banking consortium under which several short-term credit facilities were made available. It includes the possibility of issuing Euro-commercial paper up to an amount of U.S.\$ 150 million and a long-term credit arrangement permitting Akzo to make use of multicurrency bankers' advances up to an amount equivalent to U.S.\$ 100 million.

Since several other standby arrangements were terminated before they expired, the volume of unused medium- and long-term credit facilities remained virtually unchanged from the level at year-end 1984. Due to the decline in the value of the dollar, however, translation into guilders reduced the level from Hfl 780 million at December 31, 1984 to Hfl 680 million at December 31, 1985.

## 12 Liquidity

At year-end, cash and short-term investments aggregated Hfl 1,485 million—up Hfl 418 million from the previous year.

Together with the above-mentioned credit facilities, we have ample funds to finance the Group's development in the direction envisaged.

### Financing in 1986

In view of the ample liquidity further additions to our cash position to finance existing activities will not be required in 1986. If, however, the capital market offers suitable opportunities to improve our debt portfolio, we will not hesitate to utilize them.

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*Exemplifying the use of advanced equipment is the scanning Auger electron spectrometer employed in performing surface analyses of such materials as coatings, metals, and composites.*



## Research and Technology

The cost of our corporate and divisional research institutes aggregated Hfl 725 million in 1985, compared with an amount of Hfl 638 million in 1984.

After deduction of the cost of the operational support provided by these institutes, net R&D expenditure was Hfl 662 million (1984: Hfl 587 million).

The number of employees involved in R&D was up 500 to 5,420 at year-end.

The year 1985 was a turning point for our research in many respects. For the first time in ten years the number of R&D employees rose. Work was started on new research projects and existing promising programs were expanded. There are two reasons for these stepped-up research efforts. First, the Group's satisfactory performance enables us to take initiatives aimed at the development of new activities. Second, the rapid advances in technology provide us with many opportunities to pursue such activities. This technological progress is not only manifest in the chemical industry itself, but also, and in particular, in many industrial sectors where chemical products are applied.

A key research objective continues to be the rendering of the technological support necessary to maintain or strengthen our competitive positions in existing markets. For our man-made fibers and commodity chemicals, where manufacturing costs play an important role, efforts are being made to improve production processes. Akzo Engineering is making a major contribution in this regard.

In the markets for specialty products, including pharmaceuticals and diagnostics, specialty chemicals, coatings, and engineering plastics, greater emphasis is being placed on product improvement and product innovation. The development potential of these markets is determined by technological innovation rather than by volume growth. As a consequence high demands are made on the quality of R&D, Akzo Engineering, and the marketing organization.

In order to open up markets with high growth and earnings potential, an increasing amount of effort is being invested in devising new products for high-tech applications which are still in the initial stages of development. Examples are sophisticated materials for use in, among others, aerospace, electronics, the process industry, and the medical sector.

We are convinced that such materials, with customized chemical and physical properties, offer high growth potential. Our present knowledge in the fields of polymers and specialty chemicals constitutes a sound research base on which to develop these new products. A major step to enhance this knowledge was the decision made in 1985 to set up a development laboratory for composite materials. The distinguishing characteristic of the research to be

performed there is that it is highly applications-oriented and calls for intensive cooperation and consultation with the processing and end-use industries at an early stage.

In many areas Akzo has already entered into cooperation arrangements with others to undertake joint research programs. In a few instances these programs are undertaken within the scope of development programs that are sponsored by national and European authorities.

Other major areas with high growth potential are diagnostics and pharmaceuticals manufactured using modern biotechnology. Until recently biotechnological methods were mainly applied to innovate processes for existing products. But increasingly new products using biotechnology are beginning to emerge, notably in diagnostics, a sector where we hold a leading position.

Research efforts aimed at developing new products and at improving existing products and processes account for about 80% of the total R&D program. More than half of these efforts are intended for new end-use areas.

In 1985 acquisitions and divestments caused a major shift in our research. The addition of the research facilities of Litton Bionetics and Levis strengthened, respectively, our research base in the fields of diagnostics (notably those based on advanced biotechnology) and coatings. The divestiture of American Enka reduced our R&D work for textile and carpet fibers.

A further enhancement of our R&D efforts is planned. This will include expansion of existing laboratories and recruiting highly qualified scientists in disciplines where such employees are badly needed. Furthermore, it is anticipated that—just as in 1985—new R&D capacity will be added as a result of acquisitions. Finally, certain research will be contracted out to selected scientific institutes. For this purpose our relations with the international academic world will be intensified and extended.

Further data on developments and projects can be found in the appropriate product group sections.

## Human Resources

The decline in the total number of employees from 66,100 at year-end 1984 to 65,000 at year-end 1985 was the net result of decreases due to the sale of American Enka (4,500) and the Brazilian-based company CIRNE (600) and increases due to autonomous growth (1,600) and acquisitions (2,400).

Autonomous growth in the number of employees was mainly recorded by Enka and Akzo Pharma, reflecting the significant recovery of Akzo's earning capacity in the last few years, which has also boosted investment activities. Increases due to acquisitions were mainly attributable to Akzo Coatings and Akzo Pharma.

| Number of employees, December 31 | 1985          | 1984   | change  |
|----------------------------------|---------------|--------|---------|
| Enka                             | <b>28,600</b> | 27,900 | + 700   |
| Akzo Zout Chemie                 | <b>4,100</b>  | 4,500  | - 400   |
| Akzo Chemie                      | <b>5,100</b>  | 5,000  | + 100   |
| Akzo Coatings                    | <b>9,600</b>  | 8,600  | + 1,000 |
| Akzo Pharma                      | <b>10,800</b> | 9,400  | + 1,400 |
| Akzo Consumenten Produkten       | <b>3,700</b>  | 3,200  | + 500   |
| Other companies                  | <b>3,100</b>  | 7,500  | - 4,400 |
| Total                            | <b>65,000</b> | 66,100 | - 1,100 |
| of which Akzo America            | <b>5,600</b>  | 8,800  | - 3,200 |

While the redistribution of work remains a topical issue in several Western European countries, the priority given to this matter differs from country to country. Often a more differentiated approach is followed elsewhere than is the case in the Netherlands.

In early 1985, consultations with labor unions in the Netherlands led to the decision to commence a joint study to look into the possibilities of a redistribution of work that will go beyond the measures taken so far. This study included such subjects as early retirement schemes, extra recruitment of young persons, part-time work, and other types of short work.

The outcome of the study corroborated our opinion that shorter work, in particular for the work force at large, would not make for efficient, internationally competitive production and provision of services. An exception should be made for early retirement which, although costly, has a demonstrable effect on employment.

We hold the view that Akzo can better contribute to improving the employment situation by an aggressive investment policy aimed at process and product innovation than by devising programs geared to redistributing existing work. The effect of such investments should be enhanced by appropriate training and reschooling activities to eliminate the difficulties that are met in filling vacancies with skilled staff.

We are committed to measures directed to alleviating joblessness among young persons. Therefore we are pleased to report that during 1985 we were able to raise the number of technical and administrative apprenticeships offered to young persons in the Netherlands and the Federal Republic of Germany.

The adoption of an aggressive investment policy requires the Group to expand its pool of highly qualified personnel, despite the staffing problems that are currently being encountered. This calls for enhanced emphasis on the development and optimal utilization of management

potential. We therefore attach great importance to job rotation in order to acquaint eligible candidates with the different facets of the Group.

We owe a debt of gratitude to our employees for their great effort. Their energies and dedication enabled the Company to achieve excellent results once again, and these results provide a sound basis for further healthy growth and strengthening of the Group.

Apart from any changes occurring because of acquisitions or divestitures, we anticipate that employment will continue to rise in 1986, although modestly.



*Appropriate training of personnel to ensure optimal use of information technology in office and manufacturing operations is a focus of attention.*

# Product Groups

The statistics presented below illustrate the relative importance of each of the six product groups in terms of net sales, operating income, invested capital, and expenditures/depreciation in respect of property, plant and equipment.

| Millions of guilders                       | Net sales     |               | Operating income |              | Invested capital* |              | Property, plant and equipment Expenditures |            | Depreciation |            |
|--|---------------|---------------|------------------|--------------|-------------------|--------------|--|------------|--------------|------------|
|  | 1985          | 1984          | 1985             | 1984         | 1985              | 1984         | 1985                                       | 1984       | 1985         | 1984       |
| Man-made fibers                            | 5,226         | 5,035         | 291              | 302          | 1,662             | 2,446        | 291  | 239        | 206          | 215        |
| Chemical products                          | 5,155         | 4,800         | 474              | 403          | 2,393             | 2,362        | 396  | 293        | 230          | 207        |
| Coatings                                   | 2,171         | 1,973         | 130              | 144          | 894               | 738          | 113  | 73         | 48           | 41         |
| Pharmaceuticals                            | 2,138         | 1,849         | 355              | 306          | 987               | 809          | 70   | 63         | 50           | 44         |
| Consumer products                          | 1,677         | 1,302         | 87               | 69           | 359               | 366          | 31   | 26         | 22           | 21         |
| Miscellaneous products                     | 1,903         | 1,826         | 191              | 168          | 675               | 605          | 107  | 90         | 52           | 48         |
| <b>Total</b>                               | <b>18,270</b> | <b>16,785</b> | <b>1,528</b>     | <b>1,392</b> | <b>6,970</b>      | <b>7,326</b> | <b>1,008</b>                               | <b>784</b> | <b>608</b>   | <b>576</b> |
| Intra-Group deliveries, nonallocated items | (260)         | (265)         | (63)             | (52)         | (138)             | (123)        |  |            |              |            |
| <b>Total</b>                               | <b>18,010</b> | <b>16,520</b> | <b>1,465</b>     | <b>1,340</b> | <b>6,832</b>      | <b>7,203</b> | <b>1,008</b>                               | <b>784</b> | <b>608</b>   | <b>576</b> |

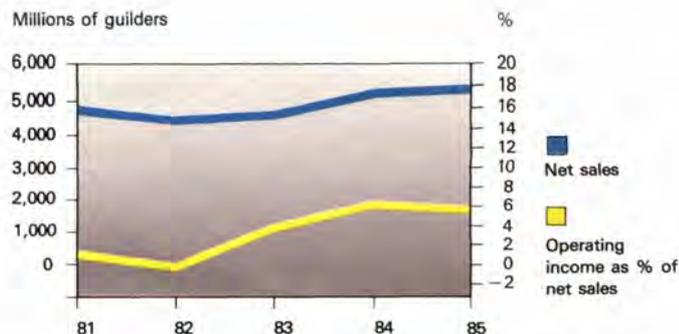
The terms and conditions for intra-Group deliveries are negotiated at arm's length and therefore are, in principle, identical with the ones used in transactions with third parties. International intra-Group deliveries and international deliveries within a single product

group are made in accordance with standard procedures that take due account of tax, currency, and pricing regulations in force in the countries concerned.

| Financial statistics   | Operating income as % of net sales |            | Operating income as % of average invested capital |             | Net sales/av. invested capital ratio |             | Expenditures/depreciation ratio |            |
|------------------------|------------------------------------|------------|---|-------------|--------------------------------------|-------------|---------------------------------|------------|
|                        | 1985                               | 1984       | 1985  | 1984        | 1985                                 | 1984        | 1985                            | 1984       |
| Man-made fibers        | 5.6                                | 6.0        | 14.2  | 12.6        | 2.54                                 | 2.09        | 1.4                             | 1.1        |
| Chemical products      | 9.2                                | 8.4        | 19.9  | 18.4        | 2.17                                 | 2.19        | 1.7                             | 1.4        |
| Coatings               | 6.0                                | 7.3        | 15.9  | 20.7        | 2.66                                 | 2.84        | 2.4                             | 1.8        |
| Pharmaceuticals        | 16.6                               | 16.5       | 39.5  | 38.7        | 2.38                                 | 2.34        | 1.4                             | 1.4        |
| Consumer products      | 5.2                                | 5.3        | 24.0  | 20.3        | 4.63                                 | 3.82        | 1.4                             | 1.2        |
| Miscellaneous products | 10.0                               | 9.2        | 29.8  | 27.8        | 2.97                                 | 3.02        | 2.1                             | 1.9        |
| <b>Total</b>           | <b>8.1</b>                         | <b>8.1</b> | <b>20.9</b>                                       | <b>19.3</b> | <b>2.57</b>                          | <b>2.38</b> | <b>1.7</b>                      | <b>1.4</b> |

\* Total assets of consolidated companies, less cash and short-term investments, and less other current liabilities.

# Man-Made Fibers



## 16 General

The favorable development of man-made fibers continued. This satisfactory performance was entirely attributable to Enka. American Enka was seriously harmed by textile imports into the United States, as is shown in the following table.

| Millions of guilders | Net sales    |              | Operating income |            |
|----------------------|--------------|--------------|------------------|------------|
|                      | 1985         | 1984         | 1985             | 1984       |
| Enka                 | 3,853        | 3,576        | 330              | 262        |
| American Enka        | 1,373*       | 1,459        | (39)*            | 40         |
| <b>Total</b>         | <b>5,226</b> | <b>5,035</b> | <b>291</b>       | <b>302</b> |

\* Until December 16, 1985.

Textile and carpet fibers as well as industrial fibers accounted for the improvement in Enka's performance. As in 1984, production capacities were fully utilized, resulting in delivery bottlenecks for some products. In addition to the fine performance turned in by Enka's operations in the Netherlands and the Federal Republic of Germany, the excellent results achieved by La Seda de Barcelona and Polyenka (Brazil) were gratifying.

With the divestiture of American Enka, our marketing activities in North America for industrial fibers were transferred to Enka America Inc.

The remainder of the section on man-made fibers omits all further data on American Enka.

### Man-Made Fibers for Textiles and Carpets

Sales increased from Hfl 2,069 million in 1984 to Hfl 2,204 million in 1985, while operating income showed a relatively stronger increase, reflecting higher margins.

In 1985 the Western European textile industry was positively influenced by a favorable business climate and increased consumption of textiles. The high U.S. dollar improved the competitiveness of this industry by reducing deleterious imports from the Far East and enhancing export activities. In addition, depleted textile inventories were replenished.

These developments resulted in such a great demand for man-made fibers that we were not able to utilize all sales opportunities, especially for rayon filament. The favorable market situation and full capacity utilization resulted in higher selling prices. Against this we registered higher prices for raw materials.

The better balanced market conditions are undoubtedly also attributable to the capacity reductions implemented over the years by Western European man-made fiber producers.

The performance of polyester filament continued to

improve during 1985. The modernization project now underway for a major part of yarn production in Oberbruch (Federal Republic of Germany) will strengthen our leading position for flat textile filament in the Western European market because it will result in low-cost, high-quality products.

Since the market for polyamide textile filament remains extremely weak, we are considering terminating its production in Emmen some time in the future. Polyester staple for cotton blends for leisure wear fabrics met with good demand. The production facilities in Emmen and Barcelona will be modernized.

The brisk demand for our rayon filament during the year could not be fully met.

For our polyamide carpet yarns, which are mainly used for contract carpeting in offices, hotels, etc., we recorded an improved performance. Preparations are underway to modernize a major part of the Emmen polyamide carpet yarn production facility.

### Man-Made Fibers for Industrial Uses

Sales of industrial fibers rose from Hfl 1,507 million in 1984 to Hfl 1,649 million in 1985. As in 1984, a strong demand for reinforcing materials continued, principally because of the healthy economic climate and the strong U.S. dollar.

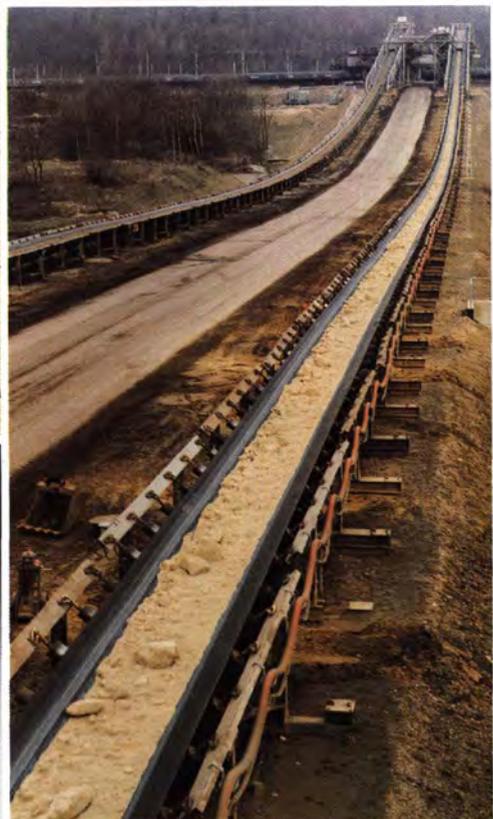
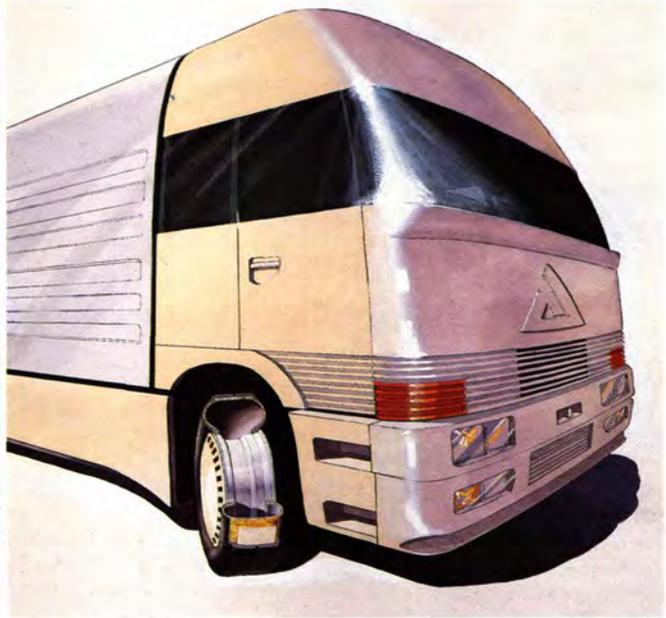
The increase in operating income was relatively lower. The improvement for synthetic products and steel cord was partially offset by lower margins for rayon yarns.

The major market for our reinforcing materials is tires for the transportation industry. By and large, the performance of the European automotive industry was satisfactory, and this led to higher volume sales of tires. Offsetting this trend, however, demand in the tire replacement market decreased, resulting on balance in lower tire production.

Insufficient production capacity created delivery problems for our yarns in the first half of the year, which were largely overcome in the second half.

In the other product areas shipments of synthetic yarns stabilized at a high level or were increased. Sectors that exhibited no growth were shipping and fishery, industrial fabrics, and sewing yarns for industrial uses. Polyester yarns for mechanical rubber goods, including conveyor belts, and for auto safety belts, whose use for rear seats is now compulsory in several countries, showed substantial growth in volume sales. For polyester yarns delivery bottlenecks occurred because demand exceeded capacity.

The large capital investment projects for the modernization of polyamide 6 and 6.6 production are nearing completion. For polyester major projects are scheduled to be completed in the coming years.



Typical uses of aramid include: composites for aerospace applications, reinforcing materials in auto tires and conveyor belts,

fabric for bullet-resistant garments, and pulp for clutch and brake pads, where it replaces asbestos.

Enka added aramid and carbon fibers to its range of reinforcing materials. Carbon fibers and, to a lesser extent, aramid fibers are used in combination with plastics, metals, or other materials to form structural composites, which can be used for existing and new areas of application. With the start-up of the *Twaron*<sup>®</sup> plants in Delfzijl (raw materials) and in Emmen (spinning), Enka will enter the stage of large-scale commercialization of aramid fibers. The *Twaron*<sup>®</sup> plants involve capital expenditures of approximately Hfl 600 million, of which Hfl 400 million is for property, plant and equipment. In late February 1986 the *Tenax*<sup>®</sup> carbon fiber plant at Oberbruch, Federal Republic of Germany, went on stream. This plant represents an investment of approximately Hfl 55 million.

The strong growth and profit potential of these new additions to our range of industrial fibers is a good reason for us to devote some extra attention to these two new products, and notably to *Twaron*<sup>®</sup>.

#### **Twaron<sup>®</sup> Aramid Fibers**

Aramide Maatschappij v.o.f., the fifty-fifty joint venture with Noordelijke Ontwikkelingsmaatschappij, will commence production of raw materials and fibers in 1986. Production is projected to parallel market demand until the full capacity of 5,000 tons per year is utilized. The products will mainly serve the market in Western Europe. The fibers are marketed by Enka.

The polymer production technology and the spinning process technologies were pioneered by Enka. Akzo Zout Chemie developed the process technology for the raw material paraphenylene diamine.

The solvent system used in the production process of aramid fibers was developed and patented by Enka in the early seventies.

The new technology constitutes an important step forward in the development of super strong fibers. Further optimization of the technology is a principal objective for the coming years.

The unique properties of *Twaron*<sup>®</sup> make the material eminently suitable in many areas of applications. It has low weight and high strength, does not support combustion or is self-extinguishing, does not melt, has a high modulus (stiffness) and low elongation, and also has a high resistance to abrasion.

*Twaron*<sup>®</sup> is used for the reinforcement of rubber goods such as tires, hoses, V-belts, and conveyor belts. Since aramid fibers have high thermal and abrasion resistance and do not melt, they are excellently suited to replace asbestos in friction linings such as brake and clutch pads in cars, and in seals and gaskets.

Because of its high modulus and high strength the product is increasingly being applied as a reinforcing material in plastics. The product is also used for ropes and cables, while its use as a reinforcing material in concrete

and aluminum is under development. Another important use of *Twaron*<sup>®</sup> is as an antiballistic material.

Research into further applications will undoubtedly lead to new markets. Broadening of the product range and expansion of production capacity are under study.

The patent dispute with Du Pont was not resolved in 1985. Early in 1986 a ban on the importation of our aramid fibers into the United States came into effect. We appealed to the federal court against this trade-political decision of the U.S. International Trade Commission (ITC). Furthermore, the ITC exclusion order caused us to lodge a complaint with the European Commission, which complaint was admitted.

#### **Tenax<sup>®</sup> Carbon Fibers**

After the introduction in the Western European market of *Tenax*<sup>®</sup> J carbon fibers procured from our Japanese licensor Toho Rayon, we will eventually be able to supply this market with fibers from our new plant, which is scheduled to have an initial annual production capacity of 350 tons. The markets served by carbon fibers not only include technologically advanced industries such as aerospace, mechanical engineering, electronics, and automotive engineering, but also the manufacture of sporting goods such as tennis rackets, golf clubs, and fishing rods.

The introduction of the Japanese-produced fibers afforded Enka the opportunity to create a good market position. In addition to extra laboratory facilities set up to render optimal technical service to our customers, the construction of a pilot plant is being considered.

#### **Joint Ventures**

The joint venture Aramide Maatschappij v.o.f. is referred to in the section on *Twaron*<sup>®</sup> aramid fibers.

Aggregate sales of our five joint ventures engaged in fiber activities in Latin America and India increased from Hfl 1,160 million in 1984 to Hfl 1,190 million in 1985. Total production capacity of these joint ventures, which was almost fully utilized in 1985, is approximately 110,000 tons per year and covers both textile and industrial fibers. Investments for expansion and modernization are regularly being made.

Despite a deteriorating economic climate, Fibras Químicas S.A. (Mexico) registered satisfactory earnings.

Enka de Colombia S.A. maintained volume sales and income at about the prior year's level, although the market for polyester textile filament was weak for some time.

Enkador S.A. (Ecuador) continued its healthy performance in 1985.

Aided by an improved product mix, COBAFI S.A. (Brazil),

a producer of industrial fibers and fabrics, was able to compensate the adverse effects of intensified price control measures and recorded satisfactory earnings.

Century Enka Ltd (India) again enjoyed a good year. In 1986 its existing range of textile fibers will be supplemented with industrial fibers. Ground was broken for a second plant.

#### Research and Development

In 1985, research efforts concentrated on the high-performance reinforcing materials *Twaron*<sup>®</sup> (aramid fibers), *Tenax*<sup>®</sup> (carbon fibers), and silica fibers.

Further process and product improvements were realized for *Twaron*<sup>®</sup> fibers. Research also contributed to the start-up of the spinning plant in Emmen. New aramid pulp types were developed for asbestos replacement.

Research efforts also proved effective with respect to the start-up of carbon fiber production. Much time and effort was spent on the development of carbon fibers to be used in composite materials for applications in the aerospace industry, in the automotive industry, and in sporting goods.

The pilot plant for silica fibers was started up. Product

samples were supplied to third parties for high-temperature filtration tests and insulation trials.

The activities to improve product quality and achieve greater cost effectiveness in the production of synthetic fibers were continued. In the context of the modernization programs that are currently being implemented, the replacement of obsolete equipment and process automation are being emphasized.

#### Outlook for 1986

For man-made fibers (exclusive of American Enka), 1985 was a good year in every respect. The factors that played a leading role in this performance will be less dominant in 1986.

We do not expect significant volume growth for most of our products. Any increase in sales will be modest.

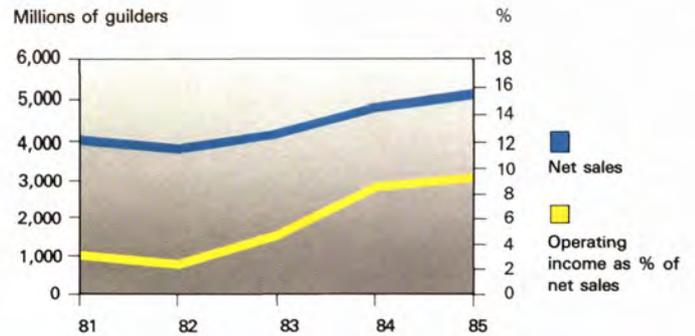
Textile and carpet fibers should match the performance of 1985, despite a possible slight weakening of business conditions for textiles. Intensified competition will exert some pressure on operating income from industrial fibers.

By and large we expect a lower but nevertheless satisfactory operating income.

*The carbon fiber plant at Oberbruch (Federal Republic of Germany) was officially opened on February 26, 1986.*



# Chemical Products



## 20 General

Sales of chemical products rose 7% to Hfl 5,155 million.

General business conditions were favorable for this group of products, although the effect of a lower dollar was felt in several product sectors during the second half of the

year. For the most part plants operated at near capacity.

Operating income increased by Hfl 71 million to Hfl 474 million in 1985.

## Salt and Heavy Chemicals

Sales of this product group were up from Hfl 2,302 million in 1984 to Hfl 2,482 million in 1985. Of this 8% sales gain, 3 percentage points were due to higher volume, net of acquisitions and divestitures.

on stream in 1986, this type of salt should have better access to other market areas, notably the United States.

The sale early in 1985 of our participation in Companhia Industrial do Rio Grande do Norte (CIRNE) provided us with funds to undertake projects in Brazil that are of greater strategic importance to the Group.

## Salt

The harsh 1984-85 winter season boosted demand for deicing salt both in Western Europe and North America. The high utilization rates of electrolysis plants (chlor-alkali products) led to continued high salt production rates.

In the United States considerably higher earnings were achieved in 1985. In addition to the severe winter weather, restructuring measures implemented over the years made a notable contribution to the earnings improvement. Both volume and price level were higher than in 1984. The share of International Salt in deicing salt shipments for the 1985-86 season was 47% against 44% in the previous year.

The Detroit mine was sold to third parties.



Loading a seagoing vessel with evaporated salt from the Delfzijl facility.

## Chlor-Alkali Products

During the year little progress was made in restructuring production capacities for vinyl chloride monomer and polyvinyl chloride in Western Europe. The plans announced by two major European VCM/PVC producers to set up a combined operation may accelerate such restructuring. By establishing this joint operation these companies are following in the wake of Shell Chemie Nederland and Akzo Zout Chemie, which formed the VCM/PVC joint venture ROVIN some years ago.

We are convinced that such cooperation among producers will greatly contribute to the development of more efficient and hence more profitable production in a sector that is of major importance to the Western European chemical industry.

However, the overcapacity is still too large to achieve acceptable market stability. As a result prices remained too low despite favorable demand and the effect of the fairly high dollar, which weakened the competitive position of U.S. suppliers. In the second half of the year price competition intensified as the dollar began to fall.

Even though market conditions were adverse, ROVIN's volume sales were at an acceptable level.

Demand for our electrolysis product chlorine was so intense that selling prices of chlorine and chlorine derivatives could be raised. With greater supplies of the co-product caustic soda available, prices for this product came under some pressure.

The market recovery for soda ash, which commenced at the end of 1984, continued during 1985.

It has been decided to modernize the sodium sulfate plant in Delfzijl, which will result in expanded capacity and substantially reduced energy costs.

## Other Commodity Chemicals

During the last months of 1985 the enlarged production facility for chloroform, a chlorinated hydrocarbon for industrial uses, was brought on stream.

Despite a fairly high demand for industrial colloids, products made from monochloroacetic acid feedstock, vigorous price competition of the leading suppliers blocked realization of a positive operating income. Modernization of



*The new, coal-fired, fluidized bed boiler at Hengelo, scheduled to be started up in the fall of 1986, permits efficient and environmentally clean energy production. In combustion, coal and lime are suspended on a column of air,*

*bringing high combustion efficiency at relatively low temperature. Nitrogen oxide emissions are thus controlled to a very low level, while sulfur dioxide reacts with the lime to form gypsum.*

a major part of our production process is progressing well.

Results for our crop protection chemicals were at a modest level in 1985.

After the acetic acid plant in the Rotterdam Europort area was closed in 1984, steps were taken to use the plant facilities to provide services to other chemical companies. For this purpose a new company, Chemservice Europort, was established in order to handle contract production and render services such as storage and transshipment.

### Joint Ventures

Sales by the joint ventures in the salt and heavy chemicals sector decreased from Hfl 1,130 million in 1984 to Hfl 1,040 million in 1985.

Denak, a Japanese-based producer of monochloroacetic acid, was confronted with a slight decline in export volume in the second half of 1985, which resulted in lower earnings than in the previous year.

Dansk Salt (50%) again improved its performance, in part due to the great demand for deicing salt during the 1984-85 winter season.

Elektro Chemie Ibbenbüren (chlor-alkali products) turned in a satisfactory performance.

The results of Delamine (ethylene amines) in Delfzijl were slightly down from the prior year's level.

The construction of the Delesto combined heat/power generation plant (Delfzijl) made good progress.

Volume sales of formaldehyde by Methanol Chemie Nederland (Delfzijl) were virtually unchanged and margins remained fairly constant. In the market for thermohardening resins a shift is taking place toward the use of resin qualities with lower formaldehyde emission values. New, in-house developed resin types enable MCN to meet the changed market need. With volume sales of resins stagnant, margins were under some pressure from imports from Eastern Europe.

In 1985 we purchased half of the minority interest held by the Swedish partner in Methanor v.o.f., which company operates the two methanol plants. This increased our interest in Methanor to 30%.

It is hoped that, within the EEC, attention will be given to guarding against methanol imports that may lead to serious market distortion, which would also largely inhibit the profitable exploitation of more efficiently run production facilities, like the two plants in Delfzijl. If, however, some of the price disadvantage for the feedstock could be removed, the resulting enhanced continuity would make it economically feasible to introduce process improvements that have already been developed, thus enabling us to respond adequately to competition from foreign producers.

### Energy Costs

Major investments in energy conservation projects and in

more efficient and cost-effective energy production, in conjunction with the temporarily reduced rates for electricity supplied to large-scale industrial users, have improved the competitive position of Akzo Zout Chemie Nederland vis-à-vis foreign producers.

Important energy projects include the combined heat/power generation plant now under construction in Delfzijl (jointly operated with the Groningen/Drenthe public utility company), the environmentally safe coal-fired fluidized bed boiler in Hengelo, and the optimization of energy housekeeping in our Rotterdam plants.

These and similar projects do not sufficiently offset Dutch energy prices which, for export-oriented large-scale industrial users, will from 1988 again be based on fuel costs, which are higher in the Netherlands than abroad. In addition, the coupling of natural gas prices to oil prices, and hence to the value of the U.S. dollar, increases the vulnerability of Dutch-based industries to variations in long-term domestic energy price policy. This means that insufficient weight is assigned to the importance of healthy competition with other countries.

### Safety and the Environment

During the year we reviewed the extent of the measures we will need to take in order to meet the requirements of the Dutch government in connection with its safety and environmental licensing policy.

We recognize that a better understanding of the environmental impact of industrial activities may lead to the conclusion that stricter regulation is necessary. And we continue to be persuaded that both industry and government should be ready to translate new insights into improvements. But in view of the very major effort we are now asked to undertake, regulatory agencies should practise due restraint.

In trying to meet the standards defined in the regulations we often have to go to the limits of what is technologically possible, and even then the slightest mishap may entail serious financial consequences. It is clear that we can benefit from technological advances in this area and we are working hard to achieve such improvements. The government, however, should realize that the implementation of new ideas requires time and that the financial impact of the regulations is far too great to allow hasty action.

Recent studies have shown that properly controlled incineration of waste materials at sea has no significant effect on marine ecology. Although Akzo Zout Chemie operates an incinerator in the Botlek area which is capable of burning chlorinated waste materials, we believe that it is in the best interest of the chemical industry to keep open the possibility of burning waste materials at sea.

A plant is under construction for the biological



*This purification plant in the Rotterdam Botlek area will treat wastewaters of the crop protection chemicals and vinyl chloride monomer plants. In the biological purification stage, powdered activated carbon will be added to the pretreated effluent as an adsorbent. Past experience has shown this addition to be highly effective.*

purification of wastewater from the vinyl chloride monomer and herbicides plants in the Botlek area.

With the start-up of a purification plant for the treatment of wastewater from the chlorinated hydrocarbons plant in Delfzijl the hexachlorobenzene pollution problems there have been eliminated.

For both purification plants it was necessary to develop proprietary technology within a very short time.

#### **Research and Development**

Compared with the other Akzo divisions, Akzo Zout Chemie is more process-oriented, and this is reflected in its research program. As a producer of commodity chemicals, the division aims at supplying high-quality products which can be produced at low cost and which have a minimum impact on the environment.

Dynamic process research using an on-line diagnostic computer has indicated new routes for further reductions in operating costs of the plants, and in several instances the

resulting process modifications have led to quality improvement.

The Akzo Materials Science and Corrosion Center was set up in 1985 as part of Akzo Zout Chemie Research in Hengelo. It will conduct corrosion research for all Akzo divisions.

#### **Outlook for 1986**

Akzo Zout Chemie operates at high production and volume levels, and there are no signs of an appreciable weakening of business for the Western European bulk chemicals industry. If the development of the general economy maintains its momentum, we expect that 1986 operating income will not deviate significantly from the good results achieved in the previous year.

For deicing salt in North America we anticipate further gains in operating income, provided that weather conditions favor volume sales.

The increase in sales by 7% to Hfl 2,673 million was mainly due to higher oils and fats prices in 1985, which were reflected in our selling prices for the end products—refined oils, fatty acids, and fatty acid derivatives. Because these higher prices could not be fully passed on to customers, operating income expressed as a percentage of sales lagged behind the prior year's level. In North America the severe winter of 1984-85 exerted a negative effect, and market penetration of several products was lower than expected.

Overall performance in Europe improved over the previous year. For several products quoted in U.S. dollars the impact of the lower dollar was felt as the year progressed.

#### Products for Plastic and Elastomer Manufacturers and Processors

This group of products turned in a satisfactory performance with operating income distinctly higher than in the previous year.

Output of the plastics industry, where our organic peroxides are used as initiators in polymerization and processing, was again at a high level in 1985, thus boosting the results for our products. We continue to concentrate our efforts on the development of specialty products, which also have application in areas outside the plastics industry.

Rubber chemicals, notably white fillers, once more exhibited strong volume growth in 1985. Volume sales of our specialty filler EC black, whose production was resumed in 1984, demonstrated healthy progress.

Volume sales of *Nouryset*<sup>®</sup> 200 organic glass monomer in the U.S. market were gratifying. Commencing in the spring of 1986, this market will be supplied from the new plant in Bayport, Texas. In addition to production facilities in the United Kingdom and the United States, a production unit will be constructed in Brazil (Itupeva).

Test marketing of samples of our specialty di-isocyanates as a raw material for the manufacture of high-performance polyurethanes for technical applications is showing promising results.

#### Metal Carboxylates

Both in Europe and in the United States a higher operating income was registered for this group of products. Production capacity in the United States for ester tin stabilizers—used in PVC processing—will be expanded. During the year we began marketing in the United States of a biocide (*Intercide*<sup>®</sup> ABF) for use in polyvinyl chloride and other polymers.



*Fatty amines plant at Morris, Illinois, is one of the world's largest (top). Its much smaller Sarnia, Ontario (Canada), counterpart commenced production of specialty fatty amines for laundry softeners in 1985.*

## Organic Chemicals

A satisfactory performance was recorded for fatty acids—a feedstock for several major product lines of Akzo Chemie.

Paper chemicals were affected by slower growth in the papermaking industry and intensified competition of minor producers. The development and introduction of new product types should improve the performance of this class of chemicals.

For such products as paper chemicals, surfactants, and gluconates we aim at obtaining or expanding market positions in North America—where possible, through local production.

Chemicals for offshore oil and gas production, which are used for the effective descaling of platform legs, casing, and piping, show healthy volume growth. During the year these chemicals were used on oil platforms in the North Sea and in the Gulf of Mexico. Research is currently underway to determine whether they are also suitable for the piping of power plants.

A new addition to our product range for the cosmetics industry was *Elfacos*<sup>®</sup> AT 84, which has an exceptionally mild effect in toilet soaps. We also introduced other products based on alpha-olefins that have specific properties for cosmetic and industrial applications (*Elfacos*<sup>®</sup> and *Dapral*<sup>®</sup>).

## Fatty Amines

By and large the results for fatty amines lagged behind those achieved in 1984, a fact which is mainly attributable to nonrecurring causes. In Europe, reduced capacity owing to work related to the modernization of the Littleborough plant (United Kingdom) meant that orders had to be refused. In Canada the weak potash market—an outlet for flotation agents—and the delayed start-up of the second fatty amines plant (Sarnia) had a clearly negative effect.

In the United States the downward trend was reversed in the second half of 1985 due to product endorsements by some leading detergent companies and, in general, due to increasing demand. As a consequence earnings were somewhat higher than in 1984.

Early in 1986 the fatty amines plant of Akzo Chemie Brasil came on stream. Lion Akzo (Japan) is planning capacity expansion.

## Catalysts

The introduction of cracking catalysts from the new plant in Bayport, Texas, proceeded slower and met with more problems than anticipated, but by the end of the year sales reached targeted levels. *Octaboost*<sup>®</sup> catalyst was particularly well received in the marketplace. Initially selling



*Akzo Chemie is a successful supplier of chemicals which keep clean the piping of offshore oil platforms in the North Sea and the Gulf of Mexico.*

*Shown is transportation from Aberdeen to one of the North Sea platforms.*



*By late 1986 sizable quantities of specialty di-isocyanates will become available for market introduction from a pilot plant now under construction at Deventer.*

*These materials are used to make high-performance polyurethanes for industrial applications.*

prices remained below expectations, but during the second half of the year some improvement was achieved.

Nevertheless, the cost of introduction was substantial.

In Europe we were able to maintain our market position, partially as a result of the introduction of several new catalyst types.

Both in the United States (Bayport) and in Europe (Amsterdam) further capacity expansions and facilities for new products are being realized. We are also building a new plant in Brazil. Although oil refineries are operating at very low rates of utilization, cracking plants are generally run at full capacity.

The global market for desulfurization catalysts was weak due to low rates of utilization in the petroleum industry and the shutdown of refining units. As a result of in-house developed specialties like Mild Hydrocracking Catalysts a satisfactory earnings performance was nevertheless recorded.

Catalysts for the chemical industry again achieved excellent results, with reforming catalysts doing much better than in the previous year.

#### Other Chemical Products

Margins for sulfuric acid were somewhat higher than in 1984, although the market situation continued to give us concern because of the existing overcapacities. Volume sales of silicates, including water glass used as a carrier for catalysts, showed such growth that it was decided to expand capacity.

Profit margins for orthosulfonamide were depressed due to a decline in saccharin consumption. At the end of 1985 we took over the production and sale of ortho- and parasulfonamides and derivatives (*Santicizers*<sup>®</sup>) from Monsanto. The production facilities for these specialty sulfonamides will be expanded.

#### Joint Ventures

Sales by Akzo Chemie's joint ventures rose from Hfl 650 million in 1984 to Hfl 700 million in 1985.

The largest of them is Silenka B.V. (Hoogezand), a producer of glass fibers, which recorded sales of Hfl 147 million, compared with Hfl 130 million in 1984. In the spring of 1985 it was decided to expand production capacity by constructing a third large furnace. Products for glass-fiber-reinforced thermoplastics and industrial fabrics currently account for approximately 75% of volume sales.

Glucona v.o.f. recorded satisfactory earnings, although slightly lower than in 1984 due to keener competition in the sodium gluconates sector.

Together with AVEBE (the Netherlands) we established a joint venture in Janesville (United States), which started

production of liquid gluconates in an existing plant adapted to our European technology.

In Japan the aggregate results achieved by the 50%-owned companies Lion Akzo (fatty amines), Nippon Ketjen (desulfurization catalysts), and Kayaku Noury (organic peroxides) were substantially higher than in 1984.

Early in 1986, construction commenced on a cracking catalyst plant in Brazil, named FCC—Fabrica Carioca de Catalisadores S.A. Capital expenditures will amount to more than U.S.\$ 50 million. Akzo's partners in the joint venture are the Brazilian companies Petroquisa (40%) and Oxiteno (20%).

#### Research and Development

A considerable intensification of catalyst research resulted in early product and process improvements, which bolstered our market position in 1985.

The concentration of organic process development activities, which is proceeding according to plan, has exerted a positive effect on the design of our new isocyanates process technology. Application research in the field of polyurethanes will be substantially strengthened.

Organic chemistry research produces a constant flow of process improvements and contributes to strong applications-oriented support. The importance of our exploratory work is well illustrated by the increasing number of our patent applications in existing and new areas.

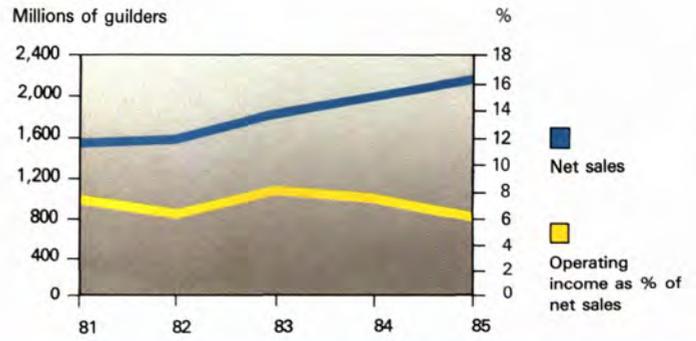
#### Outlook for 1986

Any forecast of Akzo Chemie's performance in 1986 will have to take into account that the company is already operating at high levels of activity.

The lower rate of the U.S. dollar is likely to depress income. Additionally, we expect high start-up expenses, following the completion of several major capital investment projects.

Provided that the business climate continues to be favorable, we expect that we will be able to neutralize these negative factors and achieve an operating income which equals the 1985 figure.

# Coatings



## General

Sales increased 10% to Hfl 2,171 million, principally as a result of acquisitions.

At Hfl 130 million, operating income was down from 1984. This figure includes the contribution of Levis, the Belgian paints producer acquired in May 1985.

1985 earnings reflect the intensifying price competition caused by the fact that worldwide consumption of paints has remained unchanged for several years. The severe 1984-85 winter in large parts of Western Europe adversely affected shipments, particularly of decorative paints. Introduction of our car refinishes in the United States, although making great progress, required substantial capital outlays.

In South America earnings in the first six months of 1985 were below projections but subsequently made a distinct

recovery. Our African businesses achieved good results.

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The acquisition of Levis with annual sales aggregating more than Bfrs 3.5 billion has made us Belgium's largest supplier of paints. The quality of its products—principally decorative and D-I-Y paints, automotive finishes, and general industry coatings—fits well into Akzo Coatings' marketing and technology concept.

In early 1986 we acquired almost all the shares of Blundell-Permoglaze Holdings PLC (United Kingdom). Blundell-Permoglaze is primarily a coatings company specializing in decorative paints. The transaction gives us manufacturing facilities in the United Kingdom to complement the sales function we already had there in Sikkens U.K. Ltd, a company marketing car refinishes and transparent wood finishes. Aggregate annual sales amount to approximately £ 37 million.

*Levis is the leading producer of decorative and do-it-yourself paints in Belgium.*



## 28 Expansion and Rationalization

The level of capital expenditures showed another substantial rise. In several countries, the distribution facilities were expanded or modernized. Some continuous manufacturing processes were introduced and available capacities were adjusted to match changes in the overall product range. Several locations installed facilities to meet the current strict environmental and safety regulations. Considerations of efficiency motivated such moves as the shutdown of the Frankfurt manufacturing facility. Our French coatings operations took successful steps to improve inventory control and also invested in new equipment. The Vitry plant will be closed down in early 1986.

### Decorative Paints and D-I-Y Paints

Construction activity in the Western European market continues to show weakness. In some countries we improved our market position and posted very good earnings. Concentration of our efforts on the upper end of the market, with quality products and systems which yield a sound return, contributed to this development. Increased awareness of pollution-free products was apparent in all European countries. In the Netherlands *Cetol*<sup>®</sup> TGL high-gloss transparent wood finish was successfully introduced.

In the D-I-Y market, the distribution of product shipments among the available sales channels stabilized. Earnings in the Netherlands increased. New products, including *Cetabever*<sup>®</sup> *Verfbijts Super* wood stain and *Flexa*<sup>®</sup> *Sputlak* spraying paint, were launched.

In France, we recorded an improved performance for *Astral*<sup>®</sup> decorative and D-I-Y paints.

### Automotive Finishes; Car Refinishes

For our automotive business 1985 was a difficult year. In the Federal Republic of Germany and in Spain shipments were down considerably. In France there were signs of an incipient recovery despite persistent weakness in auto sales. In the United States performance showed a stable development. Our endeavors to gain a much stronger foothold in that country by acquiring a major coatings company were not successful. Sales in Brazil showed a recovery.

Car refinishes exhibited steady growth, and in spite of toughening price competition, we continued to perform well. In several European countries, including the United Kingdom and Spain, distinct volume gains were achieved.

In the United States, market penetration efforts were intensified. We now have in place a network of depots plus

a number of training centers ready to give technical support to U.S. body shop operators. Attention is focused on the optimization of products and services.

*Autoclear*<sup>®</sup>, a new generation of clear topcoats, and a range of special effect colors (including mother-of-pearl) were introduced. With color exactness a prominent industry issue, the Color Match Training Course was modernized and extended. In a few countries we ran color styling courses to help refinishers better meet car owners' individual wishes.

### Other Products

Developments in the sector of industrial coatings for wood, metal, and plastics were as expected. In the

*ASC body shop in Detroit customizes new cars, making modifications specified by customers and then applying a Sikkens<sup>®</sup> finish.*



Netherlands and the United States better results were achieved. Growth was especially prominent in the field of coatings for plastics.

Shipments of *Zincromet*<sup>®</sup>, an anticorrosion primer for the automotive industry, exhibited a slight decline.

In anticorrosion finishes, efforts to obtain the business of large international users are now well underway. We launched an international range of products and processes under the *Redox*<sup>®</sup> label. To permit us to render vital technical support, a new application laboratory for the blastcoating of metals on the basis of the *Gritkote*<sup>®</sup> system was inaugurated.

In the field of aircraft finishes we achieved good earnings in Europe. Jointly with our U.S. operation, which was acquired last year, we drafted a global policy plan. A new topcoat, *Sikkens Aerodur*<sup>®</sup> *Clearcoat UVR*, was developed which prolongs the aesthetic life of aircraft finish systems to equal the (usually much longer) technical life.

#### Synthetic Resins

The good performance of Synthese (the Netherlands) continued. Enhanced emphasis on quality and service is paying dividends, particularly in the fields of printing ink resins and specialty resins for coatings. With the concentration of resin manufacturing activities within the coatings division, there is a sound basis for further expansion of our specialty resins. Jointly with a local partner we are building a synthetic resin facility in Malaysia, which is scheduled to go on stream in the spring of 1986.

Talens artists' colors and supplies again turned in a stable performance, achieving a satisfactory operating income.

#### Research and Development

The year was marked by accelerated product development in nearly all market segments. Water-based systems (including a basecoat) for the automotive industry, and similar products for the decorative and D-I-Y segments reached market maturity. For industrial coatings and house paints, higher solids contents were realized.

Special-effect coatings and new color ranges were developed and marketed.

Intensive cooperation and research efforts now underway with third parties in the field of automotive corrosion control (*Zincrometa*<sup>®</sup>) give us a good starting position for the development of future generations of products.



*Under the Redox<sup>®</sup> label Akzo Coatings markets anticorrosion finishes for industrial application. Our Gritkote<sup>®</sup> system for the blastcoating of metals enjoys favorable market acceptance.*

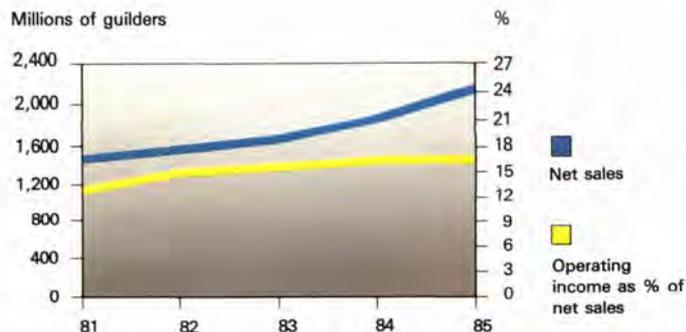
#### Outlook for 1986

In 1986 we will continue to pursue selective growth targets in terms of both markets and geographic areas.

With sales on the upswing, we anticipate that operating income for the year will top the 1985 level.

Various projects which will cause charges against 1986 income are expected to raise earnings in the years ahead.

# Pharmaceuticals



## 30 General

Sales and operating income continued to grow through the year. Sales were up almost 16% to Hfl 2,138 million, principally due to autonomous volume growth (9%) and to acquisitions in the United States. The business results of these acquisitions are recognized in Akzo's consolidated figures starting in September. All groups contributed to the advance in sales, with Organon's sales growing at a higher rate than in 1984.

Operating income increased 16% to Hfl 355 million, equivalent to 16.6% of sales (unchanged from 1984).

The year's highlights were the acquisitions of Warner Lambert's diagnostics division and of the primarily R&D-oriented activities of Litton Bionetics. For the field of diagnostics, at least, these acquisitions accomplished one of our prime objectives: establishing positions in the United States. Endeavors were also continued to secure bridgeheads in therapeutic drugs to complement our own product development efforts. The chances of success are slim, however, because there are few or no appropriate candidates and because asking prices are often considered too high.

The search for acquisition candidates in Japan, referred to in our 1984 report, continued.

Our U.S. acquisitions have caused a shift in the geographic breakdown of sales, as the following percentages show:

|                     | Europe | USA | Other regions |
|---------------------|--------|-----|---------------|
| Before acquisitions | 60     | 16  | 24            |
| After acquisitions  | 55     | 21  | 24            |

### Cost of Health Care

The need for constructive talks between authorities and innovative pharmaceutical companies is growing. As we have argued on previous occasions, there is an ever-present danger that, in their understandable desire to control expenditures, the authorities will accept the prices charged by the producers of generics (drugs not protected by patents and trademark registration) as the benchmark for national health insurance payments. Were they to do so, there would be little or no margin left to conduct time- and money-consuming research for the new, better drugs so urgently needed. Such research, after all, is funded out of the revenues generated by the sale of established products.

While this issue especially concerns the industry, it is also a significant public health matter. We are prepared to join with the authorities in looking for ways to reconcile these divergent objectives. We believe that any such joint review should also consider ways of limiting national health

insurance coverage for drugs and other items to the payment of expenses individuals can not reasonably be expected to bear themselves. Another step that might profitably be considered is a carefully controlled liberalization of self-medication options.

In Western Europe no particular progress was made in formulating regulations that will create a protected exploitation period of adequate duration for new products.

### Ethical Drugs

With sales up 7.5% and operating income practically constant, Organon can look back on a fair business year. The company's *Marvelon*<sup>®</sup> oral contraceptive, which recorded higher growth in volume sales than in the prior year, made an important contribution to sales and income. Outside Western Europe the special product profile of *Marvelon*<sup>®</sup> is now also beginning to receive increasing recognition. Important deliveries to Indonesia deserve to be singled out for special mention here, as do the associated plans for cooperation with the Indonesian Government.

The class of preparations which act on the central nervous system also contributed to sales growth.

Sales of our *Cordium*<sup>®</sup> angina pectoris preparation in France continued to develop favorably. Due to delays necessitated by health registration procedures, it will not be possible to achieve sales growth in 1986 through the introduction of this product in countries other than France.

Our research efforts give particular prominence to the development of antidepressants and cardiovascular drugs with an improved safety profile.

The recent acquisition of Bionetics Research Institute adds considerable strength to our cancer-related research. Concrete results, however, may not emerge until much later.

In the field of fertility control, where Organon International is a leader, new forms of contraception are under development. At the same time, the R&D work for other gynecological products, such as preparations for the treatment of menopausal disorders and fertility problems, is being vigorously pursued.

### Hospital Supplies

In the development of Organon Teknika during the year, two things stood out: an autonomous increase in sales of more than 21% and two acquisitions of very high strategic importance in the United States.

Sales were up in all fields covered by Organon Teknika, due in particular to regular introductions of new products. In the spring of 1985 the introduction of *Vironostika*<sup>®</sup> anti-HTLV-III (the so-called AIDS test) met with great success. Meanwhile this test has grown to be Organon Teknika's leading product. New versions were introduced of the



Organon Teknika's Vironostika® anti-HTLV-III, a highly specific Microelisa test for detecting total antibodies against HTLV-III (Aids virus), is available for any routine laboratory.

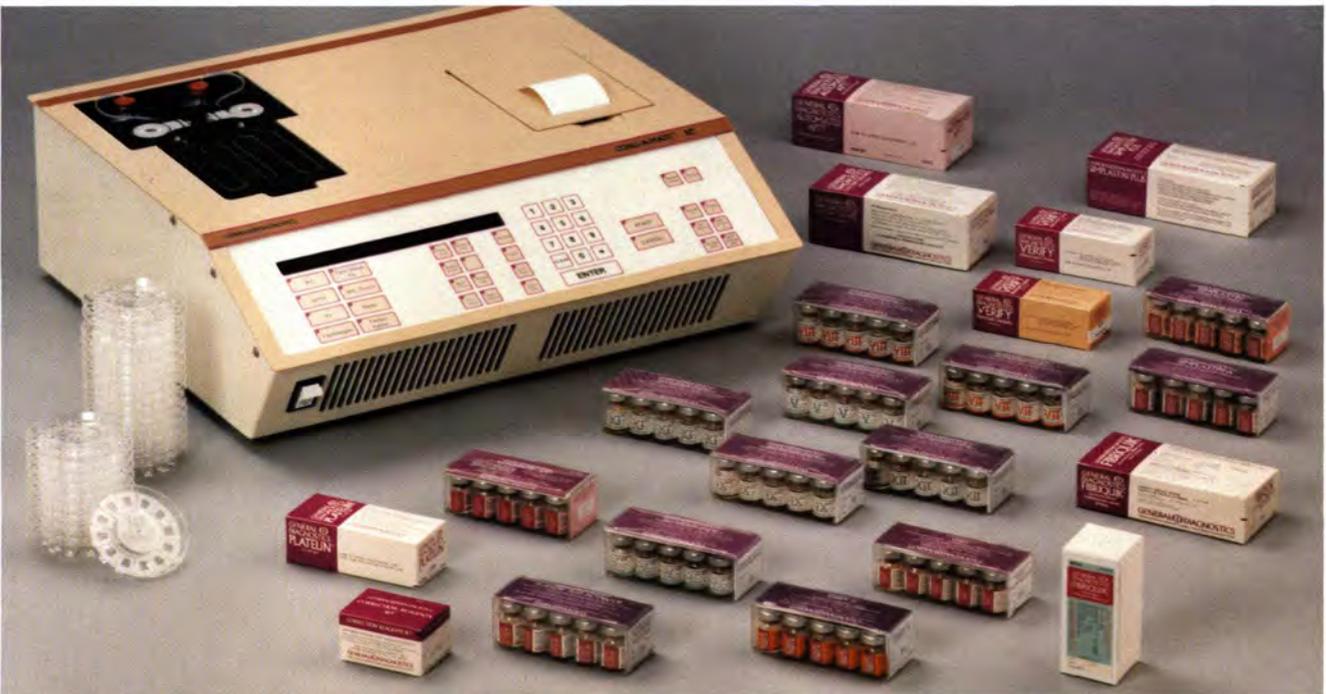
rubella and toxoplasmosis tests. The HBsAg test for hepatitis B is now based on monoclonal antibodies and a delta test designed to detect a virus associated with hepatitis B was added to the range of hepatitis diagnostics. All of these diagnostics are based on the Organon Teknika developed and patented *Enzyme Immuno Assay* system, which has achieved worldwide recognition and which is everywhere replacing the Radio Isotope Assay system. A second novel, patented, nonradioisotopic method (SPIA) was used in devising a new pregnancy test branded *Pregnospia*®.

For the use of bloodbanks we developed the *Erypur*® gravity-type leukocyte filter.

Organon Teknika introduced three new artificial kidney types which cut the cost per treatment and can reduce dialysis time, if desired.

Health registration was obtained in many countries for our *Norcuron*® short-effect muscle relaxant. The potential of this product is exciting anesthesiologists everywhere and has been acclaimed in medical literature as a major advance.

Following the acquisitions of the diagnostics division of Warner Lambert and of part of Litton Bionetics Inc., Organon Teknika now has a much wider access to the U.S. market and has a strong U.S. research organization with complementary programs. Furthermore, certain novel product classes, including blood clotting tests, were added



State-of-the-art coagulation testing with microprocessor controlled instrument and range of reagents and controls as introduced by Organon Teknika Corp. in 1985.

to Organon Teknika's overall range. The acquisitions also significantly strengthened Organon Teknika's position in the large European countries and in Japan and Canada.

### Nonprescription Products

Chefaro enjoyed a very good year. The upward trend which began in 1984 continued in 1985, bringing sales growth of upward of 21%. Operating income rose in proportion.

Despite keen competition in the pregnancy tests market, Chefaro managed to improve its position in almost all countries. This was due particularly to the success of the new *Predictor*<sup>®</sup> *Color* test in numerous markets. The test utilizes the SPIA principle. New positions were secured in France, the Federal Republic of Germany, and certain other countries.

Among Chefaro subsidiaries, a very substantial contribution to sales growth was made by Chefaro Española, which became operational in 1985. In the Netherlands, competition for existing market segments was fierce.

In mid-1985, Chefaro Nederland launched *Femapirin*<sup>®</sup>, a medication specially designed to control menstrual pains.

### Raw Materials for the Pharmaceutical Industry

Demand for almost all Diosynth products remained at a satisfactory level in 1985, causing sales and operating income to go up. The company's alkaloids further

strengthened their position in the free codeines market.

Biochemical products consolidated the substantial growth achieved over the last few years. By the end of the year increasing supplies of heparin and of pancreas glands (insulin) began to depress selling prices. To meet such needs as the production of monoclonal antibodies, a new cell culture production unit was commissioned.

Chemical products posted a significant sales gain, with both shipments and prices up. The development phase of a new, more economical fermentation route for the production of the important class of norsteroids from a byproduct of soy bean processing was completed. Expectations are that this route will become operational in 1986.

### Veterinary Products

Intervet's business developed very favorably almost across the board. Sales were up a satisfactory 19%, with operating income likewise showing an important increase.

Intervet's position in the poultry sector was strengthened, notably in the United States, with the launching of several new products. Sales of preparations for pigs were boosted. A breakthrough was achieved in vaccines for pets.

With the market introduction of *Nobi-Vac*<sup>®</sup> *Parvo-C*, intended to control a canine disease which is often fatal in puppies, a superior Intervet product was made available.

In the United States, after the highly successful introduction of poultry vaccines, plans are to extend operations to include products for large and small domestic animals.

### Outlook for 1986

We expect 1986 to bring further sales growth, helped by the contributions of the U.S. companies acquired in 1985 and by further autonomous growth.

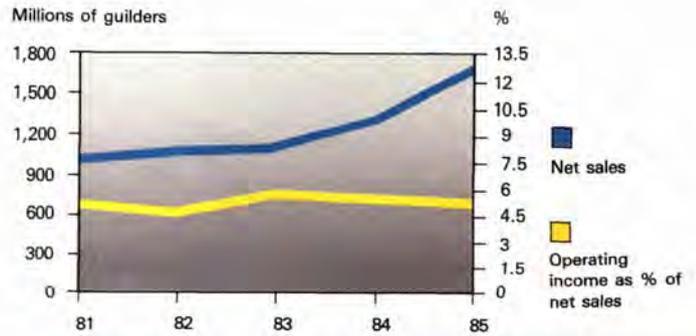
These two factors will cancel the negative impact of a marked deterioration in exchange rates of several major foreign currencies.

Operating income should be roughly on the same level as in 1985.



*Chefaro successfully introduced Femapirin<sup>®</sup> analgesic to control menstrual pains.*

# Consumer Products

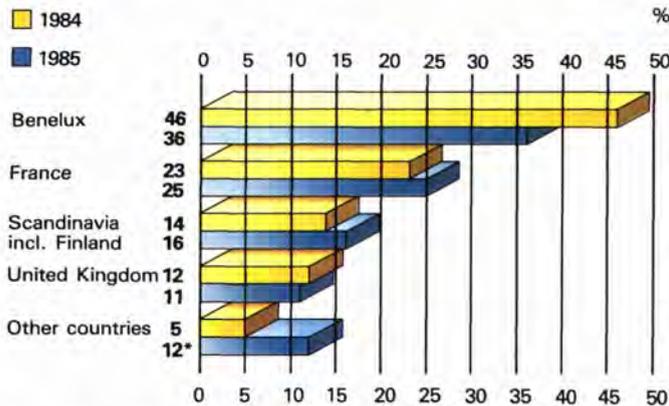


## General

Sales advanced 29% to Hfl 1,677 million, principally due to the addition of consumer product sales of the Temana companies in Europe, which Shell placed under the management of Akzo Consumenten Produkten. The acquisition of Legrain S.A. (Spain) at end-1984 also aided the rise. Operating income was up 26% to Hfl 87 million. Oils and fats excepted, all product groups contributed to the earnings gain.

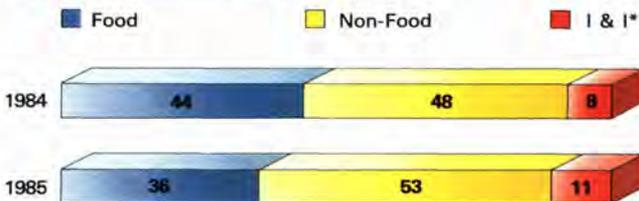
In line with our stated objective, which calls for extension or strengthening of our geographic position, we acquired before the end of the year De Danske Eddikebryggerier C. Lange A/S, commonly known by its major brand Heidelberg. This Danish company is a well-known branded foods manufacturer specializing in vinegars and dressings.

Geographic distribution of net sales (exclusive of ROMI) by country of destination (as %)



\* incl. Spain (4%), Greece (1½%), Portugal (1%), Switzerland/Austria (1%).

Product mix exclusive of ROMI (as %)



\* Institutional and industrial cleaning

## Integration of Temana Companies

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The addition of Temana to our business has extended our European presence with operations in Greece, Portugal, Austria, Sweden, and Switzerland. In the countries where we already had operations, Temana products (including insect killers and air fresheners) were added to the product line.

The synergistic effects of the integration will bring significant cost savings.

## Food

Operating income of the food business increased further in 1985, despite heavy competition.

In the Netherlands, Duyvis Recter was particularly successful with *Duyvis*<sup>®</sup> nuts and cocktail snacks. A modernization of the nut roasting and packaging line at the Duyvis plant is currently being planned. Our French subsidiary Mayolande was able to strengthen its market position for *Bénénuts*<sup>®</sup> nuts. *Bénédicta*<sup>®</sup> sauces and mayonnaises were up against keen competition.

*Roosvicee*<sup>®</sup> rose hip syrup was reasonably successful in defending its position under difficult market conditions.

California, a manufacturer of soups and bouillon products, again registered satisfactory earnings.

In the last quarter of the year the Greek foods company Consuma was hampered by the Greek government's measures to restrict imports.

## Nonfood

The significant increase in sales is largely attributable to the Temana companies and to Legrain. The synergistic effect of the addition of Temana was clearly apparent in the Scandinavian countries, the Benelux, and the United Kingdom. Kortman Redipro (the Netherlands), Kortman Intec (Belgium), Ashe (United Kingdom), and Blumøller (Denmark) posted substantial earnings gains.

At Kortman Redipro the market position of *Biotex*<sup>®</sup> improved. Prospects for *Dobbelman*<sup>®</sup> washing powder are promising, due in part to a restyled package. The reintroduction of the phosphate-free *Driehoek*<sup>®</sup> *Wasbultje*<sup>®</sup> detergent in sachet form did not have the desired result.

The effect of increased efficiency and further automation of the Kortman Redipro (Nijmegen) detergent manufacturing facility was substantial. Grada, a producer of liquid laundry detergents and cleaning agents, commissioned a new filling plant and associated finished product warehouse in Breda.

*Zwitsal*<sup>®</sup> products held their own in face of fierce competition.

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34 **Institutional and Industrial Cleaning Systems**

This sector, which initially had a modest market position, also benefited from the addition of the Temana operations as a result of geographic expansion. The development of special cleaning systems designed to fulfill market needs offers attractive prospects.

Otarès (the Netherlands) and Scan Otarès (Denmark) are the operations in this field which contributed most to 1985's higher results.

**Oils and Fats**

The results of Rotterdamse Margarine Industrie ROMI

were adversely affected in the second half of 1985 by plummeting prices in the oils and fats market.

In early 1986 ROMI was divested.

**Outlook for 1986**

Our successful profit improvement program will be continued in 1986. Its approaches will also be applied to the development of new or improved products.

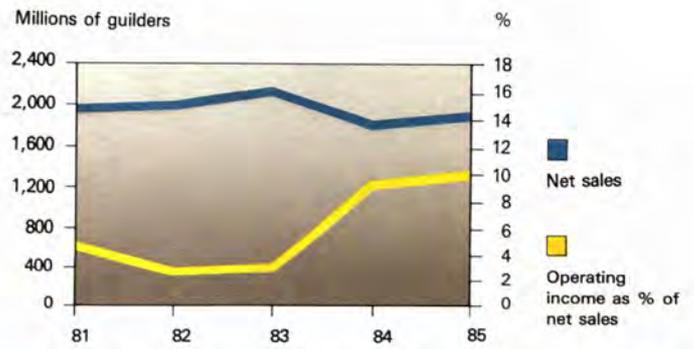
We will continue to explore opportunities for extension or consolidation of our geographic position.

For this reason, among others, we expect to realize gains in operating income in 1986.



*Heidelberg Food (Denmark), which was acquired in 1985, is a spearhead for the expansion of our food business in Scandinavia.*

# Miscellaneous Products



## General

Miscellaneous products are chiefly composed of Enka products, with the exception of leather (Akzo America).

At Hfl 1,903 million, sales gained 4%, due in particular to the excellent performance of Barmag Barmer Maschinenfabrik. The increase in operating income from Hfl 168 million in 1984 to Hfl 191 million in 1985 is also largely attributable to that company.

## Machinery and Other Engineering Products

The expectation voiced in our previous report that 1985 sales would probably fall short of the 1984 record level, in spite of good prospects for a continuation of the positive sales trend, proved unwarranted. With sales aggregating Hfl 727 million, compared with Hfl 612 million in 1984, the Barmag group has once more underscored its strong international position as a producer of special high-tech machinery and other engineering products for a variety of industries, including man-made fibers, plastics, and automobiles. This high volume sales growth, which began in 1984, owes much of its impetus to heightened capital investment activity in the principal markets and an exchange rate for the U.S. dollar which favored exports.

Textile machinery represents some 80% of sales, with spinning machines and drawtexturing machines for the man-made fiber industry the leading products. Geographically, 1985 brought a substantial shift in sales, with the significance of the Asian Pacific rim countries showing a considerable increase. Exports to the People's Republic of China in particular took off in a big way. Modernization investments by the Western European fiber industry also produced a distinct increase in sales. Against this, exports to the United States declined, reflecting the current difficult position of the U.S. textile and fiber industry. We trust that a gradual recovery of this major market will restore volume sales.

Aided by targeted research efforts, Barmag regularly manages to make technological innovations in spinning and drawtexturing machines. One feature of such innovation is the increasing prominence of automation, as embodied in advanced computerized measuring and control systems, which boost both the efficiency of production and product quality.

Alongside textile machinery, the three other product classes—machinery for the plastics industry, automotive products, and hydraulic systems—increased their share in sales to 18%.

In plastics machinery, integrated process control systems are likely to become more important. In automotive products—now consisting of vacuum and hydraulic pumps—new product development should offer an additional stimulus.

Hydraulic systems, whose producers include, besides



*Barmag's diversification efforts have resulted in an attractive position in automotive products, such as vacuum pumps for servo-assisted braking systems.*

Barmag, Beringer Hydraulik (Switzerland) and HSC Controls (United States), are now in a phase of rapid growth and in 1985 turned in sales of more than Hfl 55 million.

At December 31, 1985, Barmag had a larger order backlog than at December 31, 1984. This suggests that 1986 will be another satisfactory business year.

Akzo Plastics again enjoyed a good year. Sales advanced 4% to Hfl 472 million, with operating income expressed as a percentage of sales slightly down. Engineering plastics showed good growth, particularly in terms of sales volume.

Akzo Plastics offers a range of over 100 specialty grades based on three thermoplastic polymer classes: *Akulon*<sup>®</sup> polyamides 6 and 6.6, *Arnite*<sup>®</sup> PETP and PBTP polyesters, and *Arnitel*<sup>®</sup> polyetherester elastomer. The material properties of each of these specialty grades satisfy the specific demands of customers in the automotive, electrical/electronic, and packaging industries—Akzo Plastics' principal markets.

The automotive industry is a major user of our *Akulon*<sup>®</sup> specialties.

*Arnite*<sup>®</sup> polyester, with such properties as high dimensional stability at elevated temperatures, good electrical insulation, and good flame retardance, is well suited for electrical appliances and ovenproof menu trays, which may be exposed to temperatures of at least 220°C. Bottles for carbonated beverages are another important market for *Arnite*<sup>®</sup>, although shipments growth in some countries is being retarded by environmental considerations which are not so much technical as political in nature.

During 1985, growth projections for specialties once more led to investments for capacity increases in the Emmen plant.

Major current research topics include the study of compounds with self-extinguishing properties, improved barrier systems for bottles, alloys, and fiber-reinforced thermoplastic materials for stampable sheets. The market development of advanced composites will in part depend on the availability of so-called high-temperature thermoplastics.

### Membranes

Membrane sales were up from Hfl 211 million in 1984 to Hfl 216 million in 1985. Operating income fell short of the prior year's level. This was mainly due to worldwide intensified cost control in health care, resulting in more vigorous price competition in the artificial kidney sector. Another major factor was higher development and introduction costs for membranes and modules for new medical and industrial applications.

Consumption of artificial kidneys continues to grow. The development of more efficient hollow-fiber membranes and the realization of a new fiber bundling technology, which reduce the production costs of artificial kidneys, enable us to maintain our market leadership worldwide, in the face of increasing competition.

We succeeded in developing a modified cellulose type (*Hemophan*<sup>®</sup>) which meets all of today's demands with regard to biocompatibility. The new membrane should permit us not only to consolidate our current volume sales based on the *Cuprophan*<sup>®</sup> membrane but also to expand



The unique combination of properties of *Arnite*<sup>®</sup> polyester, which is resistant to rapid temperature changes in the range from -40°C to

200°C, makes this material excellently suitable for menu trays. These trays can be used in hot-air and microwave ovens.

our position in the hemodialysis market. The market introduction in 1985 of our oxygenator (or artificial lung) is specifically directed at Europe, where the number of open heart operations is scheduled to go up considerably. The pace of development of the therapeutic use of membrane plasmapheresis is slow because the number of scientific trials is still limited. Market acceptance of the donor plasmapheresis system is growing in line with expectations.

Turning to industrial uses, we developed the *Enka Microdyn*<sup>®</sup> crossflow microfiltration system and the *Enka TMD* (Trans Membrane Distillation) process. Crossflow microfiltration can be used to separate solids from aqueous solutions or to purify emulsions. Periodic backflushing of the membrane ensures that the membrane does not become clogged. With this condition fulfilled, continuous filtration at a high level of efficiency has become possible. The process is already used in the food and beverage industry, as well as in the pharmaceutical, chemical, and metalworking industries.

The TMD process utilizes membranes which are pervious to vapor but not to aqueous solutions. A vapor pressure differential permits a distillation process across the membrane in which solutions are concentrated and pure distillates are obtained. Among practical applications are water desalination and the concentration of acids, lyes, or other solutions. The TMD process is not dependent on a vacuum or on elaborate control equipment, and therefore operates at a significantly lower rate of energy consumption than do conventional evaporation processes.

Our industrial membrane systems, and notably the *Enka Microdyn*<sup>®</sup> modules, are already incorporated in a number of installations. For both of our processes we cooperate closely with equipment makers of established reputations. In addition to the European market, we recently began efforts to exploit the U.S. market, which we feel could provide very interesting opportunities for our innovative membrane processes.

#### Other Products

The group of other products includes nonwovens, household products, leather, and the new products developed by Enka's New Business Group.

1985 sales of these products totaled Hfl 488 million.

#### Nonwovens

Industrial nonwovens had an excellent year. This was true of bituminous roofing carriers as well as of backings for tufted floorcoverings, notably auto carpets.

Given the fine sales prospects, it was decided to expand production capacities for the various nonwoven products.

#### Household Products

Household products, which include viscose sponge products (block sponges, sponge cloth), synthetic chamois, and various cleaning cloths for consumer or industrial use, recorded a solid rise in sales.

#### Leather

The U.S. leather market is being depressed by leather and shoe imports, which present the leather industry with a major idle capacity problem. Rationalization measures adopted by Armira brought an improvement in operating income.

#### New Products

Enka's New Business Group is responsible for the development and market introduction of new products. A commercial future is beginning to be apparent for polyimide-clad metal foil for flexible printed circuits and for flexible interconnection circuits. The material can be exposed to high temperatures without the risk of delamination and without detriment to its mechanical and electrical properties. Production in the United States and the Federal Republic of Germany will be expanded.

Enka developed silica fibers capable of withstanding very high temperatures (up to 1,100°C). Besides for insulation and filtration purposes, the fibers are also suitable for the reinforcement of printed circuit boards. Construction of a 20-metric-ton-per-year pilot installation for market introduction of the fiber was completed in 1985.

Another new development is *Sympatex*<sup>®</sup>, a material whose intrinsic physical properties permit water vapor to pass through it without any loss in watertightness. The product is used for sports, work, and leisure wear.

#### Outlook for 1986

For our present product lines we expect 1986 to bring similar sales growth, with operating income as a percentage of sales at essentially the same level as in 1985.

## Activities by Geographic Area

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The statistics presented below concerning sales, income, invested capital, expenditures for property, plant and equipment, and number of employees of the *consolidated companies* illustrate the geographic pattern of Group operations. For a few significant ratios see the table at bottom left.

To complete the global overview, a breakdown by relevant geographic area of sales, invested capital, and number of employees of the *nonconsolidated companies* (Group interest 50% or less) has been added. The latter statistics are presented on a pro forma full-ownership basis (bottom right).

| Millions of guilders        | Net sales*    |               | Operating income |              | Invested capital** |              | Expenditures for property, plant and equipment |            | Number of employees, December 31 |               |
|-----------------------------|---------------|---------------|------------------|--------------|--------------------|--------------|--|------------|----------------------------------|---------------|
|                             | 1985          | 1984          | 1985             | 1984         | 1985               | 1984         | 1985   | 1984       | 1985                             | 1984          |
| The Netherlands             | 6,234         | 5,772         | 568              | 453          | 2,560              | 2,414        | 424  | 286        | 23,100                           | 22,400        |
| Federal Republic of Germany | 4,419         | 4,130         | 384              | 370          | 1,679              | 1,562        | 191  | 157        | 19,000                           | 18,400        |
| Other EEC countries         | 2,021         | 1,662         | 182              | 135          | 907                | 744          | 82   | 67         | 7,900                            | 6,700         |
| Rest of Europe              | 1,042         | 808           | 117              | 80           | 339                | 308          | 42   | 33         | 4,600                            | 4,400         |
| North America               | 3,510         | 3,353         | 95               | 166          | 1,047              | 1,853        | 231  | 217        | 5,400                            | 8,800         |
| Other regions               | 784           | 795           | 119              | 136          | 300                | 322          | 38   | 24         | 5,000                            | 5,400         |
| <b>Total</b>                | <b>18,010</b> | <b>16,520</b> | <b>1,465</b>     | <b>1,340</b> | <b>6,832</b>       | <b>7,203</b> | <b>1,008</b>                                   | <b>784</b> | <b>65,000</b>                    | <b>66,100</b> |

### Ratios of consolidated companies

|                             | Operating income as % of net sales |            | Operating income as % of average invested capital |             |
|-----------------------------|------------------------------------|------------|---|-------------|
|                             | 1985                               | 1984       | 1985  | 1984        |
| The Netherlands             | 9.1                                | 7.8        | 22.8  | 19.2        |
| Federal Republic of Germany | 8.7                                | 9.0        | 23.7  | 22.7        |
| Other EEC countries         | 9.0                                | 8.1        | 22.0  | 19.4        |
| Rest of Europe              | 11.2                               | 9.9        | 36.2  | 29.1        |
| North America               | 2.7                                | 5.0        | 6.6   | 9.9         |
| Other regions               | 15.2                               | 17.1       | 38.3  | 45.4        |
| <b>Total</b>                | <b>8.1</b>                         | <b>8.1</b> | <b>20.9</b>                                       | <b>19.3</b> |

### Nonconsolidated companies

| Millions of guilders | Net sales*   |              | Invested capital** |              | Number of employees |               |
|----------------------|--------------|--------------|--------------------|--------------|---------------------|---------------|
|                      | 1985         | 1984         | 1985               | 1984         | 1985                | 1984          |
| EEC countries        | 1,641        | 1,679        | 866                | 664          | 2,710               | 2,580         |
| Rest of Europe       | 40           | 39           | 10                 | 11           | 50                  | 50            |
| North America        | 21           | 16           | 19                 | 14           | 120                 | 90            |
| Latin America        | 1,011        | 1,057        | 679                | 667          | 5,680               | 5,520         |
| Other regions        | 620          | 538          | 450                | 412          | 2,630               | 2,430         |
| <b>Total</b>         | <b>3,333</b> | <b>3,329</b> | <b>2,024</b>       | <b>1,768</b> | <b>11,190</b>       | <b>10,670</b> |

In appraising the relatively favorable figures for our companies in the "Other regions," due allowance should be made for the fact that operating income is to be reduced by high financing charges as a result of strong inflation.

\* By origin, i.e. sales of the companies established in the geographic area.

\*\* Total assets, less cash and short-term investments, and less other current liabilities.

## General

The principal change in the geographic pattern of Group operations is the reduced share of North America in invested capital and number of employees owing to the divestiture of American Enka at mid-December 1985. In light of the high priority assigned to a strong North American presence, we are confident that the share in invested capital will go up again to at least 20% over the next few years.

As yet barely perceptible in the figures is our heightened awareness of the commercial potential of several Asian nations, including China.

At Hfl 6.1 billion, exports by the consolidated companies in the Netherlands and the Federal Republic of Germany, our main centers of activity, were up 9% on the prior year's figure (Hfl 5.6 billion). The share of exports in total sales of our operations in these countries stood at 57% (1984: 56%).

## Europe

Business in *the Netherlands* showed healthy growth. Sales of the consolidated companies advanced 8%, but operating income was 25% ahead on 1984. This raised operating income as a percentage of sales from 7.8% in 1984 to 9.1% in 1985—well in excess of the Group average of 8.1%. The principal contributions to the gain in earnings were made by Enka and Akzo Zout Chemie.

The year's fine performance is also reflected in greater investment activity and increased employment. Expenditures for property, plant and equipment in 1985 aggregated Hfl 424 million (up 48%), and project authorizations added up to more than Hfl 0.5 billion. Additionally, significant amounts were spent for the joint ventures Aramide Maatschappij and Delesto (combined heat/power generation).

The number of employees rose 3% to 23,100 at December 31, 1985.

Group operations in the *Federal Republic of Germany* are dominated by Enka AG and Barmag Barmer

Storage of deicing salt in Massachusetts U.S.A.



Maschinenfabrik. Sales were up 7% to Hfl 4.4 billion, with operating income in relation to sales decreasing from 9.0% in 1984 to 8.7% in 1985.

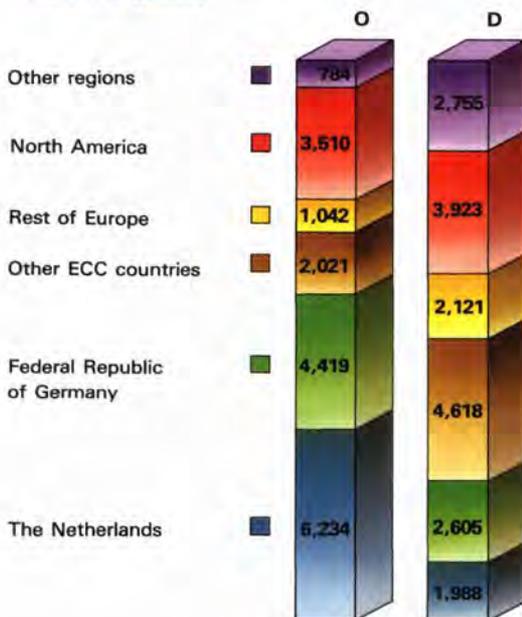
Enka (fibers and nonfiber products), with manufacturing facilities in Obernburg, Kelsterbach, Oberbruch, and Wuppertal, had a good year. Barmag achieved a record high and bolstered its position as an exporter to Southeast Asia. The results of our other operations in product sectors such as salt, specialty chemicals, and pharmaceuticals were satisfactory. The lower results of the coatings companies were in part due to reduced shipments to the automotive industry.

In *France* a recovery in the business of Akzo Coatings France is now becoming apparent as efficiency measures and rationalization investments are beginning to take effect.

In *Spain*, the fiber company La Seda de Barcelona had an excellent year, with operating income some 25% higher than in the previous year. Here, too, the recent modernization investments are beginning to show returns.

Earnings of our companies in the rest of Europe in the aggregate approximated the 1984 level.

1985 net sales, by origin (O) and by destination (D)  
- millions of guilders



## North America

With a major change in the composition of the product mix—due to divestiture of our fiber interests and expansion of our diagnostics activities—the fundamental conditions for a recovery of profitability of our operations in this geographic area have been fulfilled. Integration of our diagnostics interests in North America is well underway. Earnings of Akzo Chemie America fell short of the 1984 level. The company's capital expenditures were mainly for expansion of facilities for the production of cracking catalysts and fatty amines.

Sales of Akzo Coatings America were up but earnings trailed the 1984 level, due in part to the high introduction costs for car refinishes and to keener competition for our anticorrosion primer for the automotive industry.

International Salt had an excellent year, on the strength of high volume sales of deicing salt. Operational responsibility for this company was transferred to Akzo Zout Chemie with effect from January 1, 1986.

## Other Regions

The geographic centers of our activities in *Latin America* are *Brazil*, *Mexico*, and *Colombia*. Despite the troubled economic and financial conditions in these countries, particularly in Brazil and Mexico, we are pleased with the earnings performance both of the consolidated companies and of the nonconsolidated ones (notably the fiber operations).

Our presence in *Japan* through some seven joint ventures (chemicals, pharmaceuticals, and coatings) is comparatively modest. We continue to look for opportunities to expand our pharmaceuticals and diagnostics positions in this important country. Akzo Chemie's joint ventures, and particularly Lion Akzo (fatty amines), reported higher earnings.

We also have a special interest in other countries in the Far East, notably *China* and the *Republic of Korea*. Our contacts in China were intensified during the year, resulting in prospects of growing sales of products and know-how to that country. A new Akzo office was opened in Seoul, Republic of Korea. In *Malaysia* a plant for the manufacture of synthetic resins is under construction, which will come on stream in the spring of 1986.

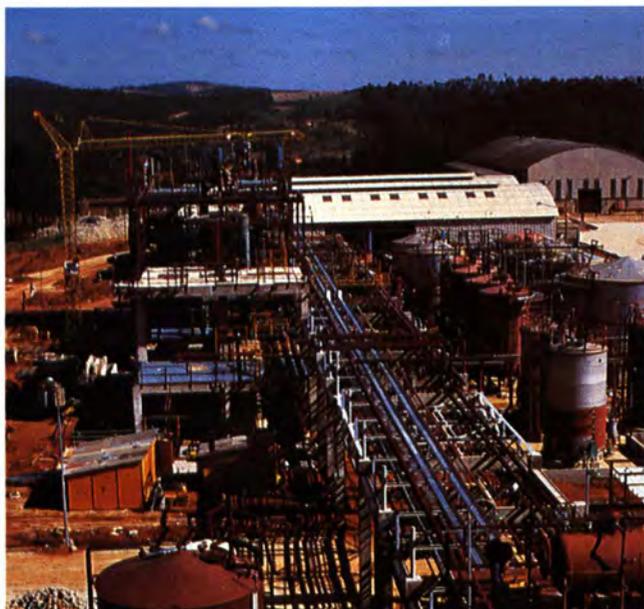
Century Enka (*India*) achieved very good earnings. The company is currently expanding its man-made fiber manufacturing capacity.

Arnhem, March 7, 1986

The Board of Management



*A producer of synthetic textile fibers, for which a second plant is now under construction, Century Enka (India) is to embark on the production of synthetic reinforcing materials.*



*Construction of Akzo Chemie Brasil's fatty amines plant in Itupeva. The plant was recently inaugurated.*



*Of worldwide renown, Enka tecnica, of Oberbruch, Federal Republic of Germany, is a high-technology producer of spinnerets and electronic testing devices for the fiber industry. Over the years the company has built up a strong export position.*

# Organization of the Akzo Group

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**Akzo N.V.**  
Arnhem  
Netherlands

Central staff departments

Central service organizations

## Divisions and products

**Enka**  
Wuppertal  
Federal Republic  
of Germany

Man-made fibers for industrial uses and textile uses, including carpets, machinery, engineering plastics, membranes, nonwovens, various industrial products

**Akzo Zout Chemie**  
Hengelo  
Netherlands

Salt, chlorine, alkali products, VCM, methanol, industrial colloids, petrochemicals

**Akzo Chemie**  
Amersfoort  
Netherlands

Specialty chemicals for plastic and elastomer manufacturers and processors, and for the paint industry; functional chemicals such as sizes for the papermaking industry, sequestrants, and surfactants; catalysts for the oil, petrochemical, and chemical industries

**Akzo Coatings**  
Hoofddorp  
Netherlands

Paints, stains, synthetic resins for industrial, professional, and consumer uses

**Akzo Pharma**  
Oss  
Netherlands

Ethical drugs, nonprescription products, hospital supplies, diagnostics, raw materials for the pharmaceutical industry, veterinary products

**Akzo Consumenten  
Produkten**  
The Hague  
Netherlands

Detergents and cleaning products for household and industrial uses, insecticides, air fresheners, health and bodycare products, foodstuffs

**Akzo America**  
Enka, N.C.  
United States

Ethical drugs, hospital supplies, diagnostics, raw materials for the pharmaceutical industry, veterinary products, specialty chemicals, coatings, leather, salt, various industrial products

## National organizations

Netherlands

Akzo Nederland, Arnhem

Belgium

Akzo België, Brussels

Brazil

Akzo Indústria e Comércio, São Paulo

## National offices

Japan

Mercator Internationaal, Tokyo

Republic of Korea

Akzo Asia—Korea Branch, Seoul

March 1986

## Board of Management of Akzo N.V.

The Board of Management consists of four members who are jointly responsible for directing the Akzo Group. In addition, the members are individually entrusted with a number of management tasks. Their main tasks and responsibilities are listed below:

### A.A. Loudon

President

*Has responsibility for:*

strategic planning, financial and social policies, external relations

*Coordinates activities in:*

the Netherlands, North America

### J. Veldman

*Supervises:*

Akzo Coatings, Akzo Pharma, Akzo Consumenten Produkten

*Has responsibility for:*

effective functioning of staff departments and Group services

*Coordinates activities in:*

Spain, Portugal, Asia except Japan and People's Republic of China, Latin America, Africa, Australia, New Zealand

### H.J.J. van der Werf

*Supervises:*

Akzo Zout Chemie, Akzo Chemie

*Has responsibility for:*

research, technology, and energy policies

*Coordinates activities in:*

Belgium, France, Italy, Eastern Europe, Japan

### H.G. Zempelin

*Supervises:*

Enka

*Has responsibility for:*

organization, automation

*Coordinates activities in:*

Federal Republic of Germany, Switzerland, Austria, Scandinavia, United Kingdom, Republic of Ireland, People's Republic of China

## Management Committee

The Board of Management is assisted in policy-making by a Management Committee, which includes the members of the Board.

A.A. Loudon

J. Veldman

H.J.J. van der Werf

H.G. Zempelin

S. Bergsma

G.J. Coli

F.A.G. Collot d'Escury

M.W. Geerlings

J.R. Hutter

H.B. Jacobs

A.G.J. Vermeeren

M.D. Westermann

C. Zaal

Chairman

Deputy Chairman

Deputy Chairman

Deputy Chairman

Financial Affairs

President of Akzo America

President of Akzo Zout

Chemie

Research and Technology

President of Enka

President of Akzo

Consumenten Produkten

President of Akzo Pharma

President of Akzo Chemie

President of Akzo Coatings

## Secretary

J.P. Huges is secretary to the Supervisory Council and to the Board of Management.

## Adviser

W.K.N. Schmelzer acts as adviser to the Board of Management, specifically in relation to international affairs and issues of a general social nature.

**Managements of Divisions***Enka*

J.R. Hutter                      President  
 H. Stöhr                         Deputy President  
 J.H. Katgert  
 W.H. Meyberg  
 U.G. Stark  
 G. Tückmantel

M. Schütze  
 R. van den Berg

*Akzo Zout Chemie*  
 F.A.G. Collot d'Escury        President  
 A. van Es  
 H.A. van Karnebeek

J.L. Ryon

*Akzo Chemie*  
 M.D. Westermann             President  
 J.C.E. Fuller  
 J.C.P. van Oosterom

H.C. Bijvank  
 M.E. Hartman  
 A. Moolenburgh  
 H.A. Praetorius  
 E. Snoeck

*Akzo Coatings*  
 C. Zaal                            President  
 K. Bakker  
 H.C. Ekker  
 J. Mainçon  
 J.D. Remijnse  
 K.G. Schultze

*Akzo Pharma*  
 A.G.J. Vermeeren             President  
 P.K. Brons  
 B.H.M. van Dommelen  
 T. Kalff  
 W. Smit  
 F.L. Vekemans

*Akzo Consumenten Produkten*  
 H.B. Jacobs                     President  
 P.B. van Hulst  
 B.J. Nielsen (from April 1, 1986)  
 A.M. van der Linden  
 R.S. Schortinghuis  
 J.E.H. Sikkink

*Akzo America*

G.J. Coli                         President  
 V.A. Parsons  
 P.S. Gold

**Managements of Coordinating National Organizations***Akzo Nederland*

J.W. Berghuis                 President

*Akzo België*

F.C.L. De Deken                President

*Akzo Indústria e Comércio, Brazil*

J.W. Bootz                        President

# Financial Statements

## Accounting Policies Used in Preparing the Consolidated Financial Statements

### Consolidation

The consolidated financial statements include the accounts of Akzo N.V. and all companies in which the interest of Akzo N.V. or any of its majority-owned subsidiaries separately or jointly exceeds 50% of the subscribed stock. Partnerships ("Vennootschappen onder firma") in which the interest of Akzo N.V. or any of its majority-owned subsidiaries separately or jointly equals or is less than 50% are not included in consolidation because of the absence of a controlling vote. Therefore, the balance sheets, with notes, of such partnerships are in principle included in "Other information."

All of the assets, liabilities, and results of the consolidated companies are included. Minority interest in Group equity and Group income is shown separately.

### Valuation

The principles of valuation and determination of income used in the consolidated financial statements shown on pages 47 through 54 are based on historical cost. Current-value data are furnished by way of supplementary information on page 55.

### Translation of Foreign Currencies

In the balance sheet, amounts in foreign currencies are translated into guilders at rates virtually equaling the rates of exchange in force at year's end. The valuation in guilders of the U.S. dollar convertible debentures is based, however, on a rate of U.S.\$ 1 = Hfl 3.60.

In the statement of income, amounts in foreign currencies are translated into guilders at rates of exchange fixed for each quarter as typical of the rates then applicable. Foreign exchange differences are included in income, except for foreign exchange differences resulting from translation into guilders of intra-Group loans and of stockholders' equities of affiliated companies outside the Netherlands; the latter differences are directly added to, or deducted from, Group equity.

Stockholders' equities and earnings of affiliated companies established in hyperinflationary countries, however, are determined on a guilder basis rather than on the basis of local currencies. This convention prevents the occurrence of translation differences in such stockholders' equities due to changes in exchange rates.

### Exchange Rates of Key Currencies

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The principal exchange rates used in drawing up the balance sheet and the statement of income are:

| Unit           | Balance sheet |               | Statement of income |        |      |
|----------------|---------------|---------------|---------------------|--------|------|
|                | Dec. 31, 1985 | Dec. 31, 1984 | 1985*               | 1984*  |      |
| U.S. dollar    | 1             | 2.77          | 3.55                | 3.32 * | 3.22 |
| Deutsche mark  | 1             | 1.13          | 1.13                | 1.13   | 1.13 |
| Pound sterling | 1             | 4.00          | 4.13                | 4.28   | 4.27 |
| French franc   | 1             | 0.37          | 0.37                | 0.37   | 0.37 |
| Swiss franc    | 1             | 1.34          | 1.37                | 1.35   | 1.36 |
| Spanish peseta | 100           | 1.80          | 2.06                | 1.94   | 2.00 |
| Braz. cruzeiro | 100           | 0.03          | 0.11                | 0.06   | 0.19 |

\* Average exchange rates.

### Principles of Valuation of Assets and Liabilities

#### *Intangible fixed assets*

Preparation and start-up expenses of large investment projects are capitalized and charged against operating income in not more than five equal annual installments after the facilities concerned have been put into service.

Other intangibles are not capitalized but are charged against operating income.

Purchased goodwill is charged directly against Group equity.

#### *Property, plant and equipment*

Property, plant and equipment are valued at cost less depreciation.

Cost includes the financing charges of capital investment projects under construction. Government grants, etc. are deducted from cost of acquisition.

Depreciation is computed by the straight-line method based on estimated life, which in the majority of cases is 10 years for plant equipment and machinery, and which ranges from 20 to 30 years for buildings. In cases where the book value so computed exceeds the value to the business additional write-offs are made.

#### *Financial fixed assets*

Investments in nonconsolidated companies are stated at the amount of Akzo's share in stockholders' equity. The

calculation of stockholders' equity is based as much as possible on the Akzo principles of valuation. Loans to nonconsolidated companies are carried at face value less such provisions as are deemed necessary. The other financial fixed assets are valued at the lower of cost or market.

#### *Inventories*

Inventories are stated at the lower of cost or net realizable value. Cost is defined as the full manufacturing cost related to the stage of processing.

Cost is determined by the first-in first-out (FIFO) method. Provisions are made for obsolescence.

In the valuation of inventories, profits arising from transactions between consolidated companies are eliminated.

#### *Receivables*

Receivables are stated at face amounts less such provisions as are deemed necessary.

#### *Cash and short-term investments*

Cash and short-term investments are carried at face value, with the exception of marketable private borrowings and marketable securities, which are valued at the lower of cost or market.

#### *Provisions*

Provisions for deferred taxes are stated at face value. Dividend taxes for which no compensation is available are taken into account to the extent of earnings expected to be transferred by affiliated companies in the new fiscal year. The provisions in respect of pension rights are generally computed on an actuarial basis.

Provisions for commitments and risks whose extent is uncertain but which can reasonably be estimated, and provisions made to equalize expenses among several fiscal years are shown in the aggregate under "Other provisions." The amounts of these provisions are fixed in relation to the liabilities and risks concerned and are stated at face value.

#### *Long-term debt and current liabilities*

Long-term debt and current liabilities are stated at face value. Discount on borrowings and cost of negotiating loans are capitalized and charged against income over the period until maturity.

### **Principles of Determination of Income**

The determination of income is closely associated with the valuation of assets and liabilities.

In addition, a number of specific principles are observed in the preparation of the statement of income, which are set forth below.

- Net sales is defined as the revenue from the sale and delivery of goods and services, net of rebates, discounts, and similar allowances, and net of sales tax.

- Cost of sales comprises the manufacturing cost of the goods and services sold and any inventory write-downs to lower net realizable value.

Manufacturing cost includes such items as:

- . the cost of raw materials and supplies, energy, and other materials;

- . depreciation and the cost of maintenance of the assets used in production;

- . salaries, wages, and social charges for the personnel involved in manufacturing.

- Taxes on income comprise both current and deferred taxes. No tax deductions are made from income to the extent that this income can be offset against losses incurred in prior years. From losses, taxes are deducted to the extent that they can be offset against taxes charged to income in previous years.

- Income from nonconsolidated companies consists of the Group's equity in earnings of these companies and interest received on loans granted to them, with due allowance being made for taxes on these items.

# Consolidated Balance Sheet of the Akzo Group

after allocation of profit

See notes on pages 50 through 52.

| Millions of guilders, December 31   | 1985           | 1984           | 47             |
|-------------------------------------|----------------|----------------|----------------|
| <b>Assets</b>                       |                |                |                |
| Fixed assets                        |                |                |                |
| Property, plant and equipment       | 3,843.0        |                | 4,207.7        |
| Financial fixed assets              |                |                |                |
| Nonconsolidated companies           | 482.3          | 444.6          |                |
| Other financial fixed assets        | <u>139.5</u>   | <u>165.9</u>   |                |
|                                     | 621.8          |                | 610.5          |
|                                     | <u>4,464.8</u> |                | <u>4,818.2</u> |
| Current assets                      |                |                |                |
| Inventories                         | 2,690.9        | 2,653.2        |                |
| Receivables                         | 3,114.6        | 2,892.9        |                |
| Cash and short-term investments     | <u>1,485.0</u> | <u>1,066.9</u> |                |
|                                     | 7,290.5        |                | 6,613.0        |
| Total                               | 11,755.3       |                | 11,431.2       |
| <b>Group Equity and Liabilities</b> |                |                |                |
| Group equity                        |                |                |                |
| Akzo N.V. stockholders' equity      | 4,141.6        | 4,014.5        |                |
| Minority interest                   | <u>353.1</u>   | <u>169.6</u>   |                |
|                                     | 4,494.7        |                | 4,184.1        |
| Provisions                          | 2,003.0        |                | 1,729.3        |
| Long-term debt                      |                |                |                |
| Subordinated loans                  | 184.5          | 202.6          |                |
| Other long-term debt                | <u>1,678.1</u> | <u>2,169.3</u> |                |
|                                     | 1,862.6        |                | 2,371.9        |
| Current liabilities                 |                |                |                |
| Debt to credit institutions         | 438.8          | 429.8          |                |
| Other current liabilities           | <u>2,956.2</u> | <u>2,716.1</u> |                |
|                                     | 3,395.0        |                | 3,145.9        |
| Total                               | 11,755.3       |                | 11,431.2       |

# Consolidated Statement of Income of the Akzo Group

See notes on page 53.

| 48 Millions of guilders   | 1985              | 1984              |
|---|-------------------|-------------------|
| Net sales   | 18,009.8          | 16,520.1          |
| Cost of sales   | <u>(12,343.9)</u> | <u>(11,405.1)</u> |
| Gross margin  | 5,665.9           | 5,115.0           |
| Selling expenses  | (2,857.1)         | (2,505.2)         |
| Research and development expenses   | (662.2)           | (587.4)           |
| General and administrative expenses                                       | (744.8)           | (688.6)           |
| Other revenue from operations   | <u>63.1</u>       | <u>6.1</u>        |
|   | <u>(4,201.0)</u>  | <u>(3,775.1)</u>  |
| Operating income  | 1,464.9           | 1,339.9           |
| Interest received and similar income                                      | 152.3             | 160.1             |
| Interest paid and similar expenses  | <u>(337.4)</u>    | <u>(444.8)</u>    |
| Financing charges   | <u>(185.1)</u>    | <u>(284.7)</u>    |
| Operating income less financing charges                                   | 1,279.8           | 1,055.2           |
| Taxes   | <u>(464.6)</u>    | <u>(369.6)</u>    |
| Earnings of consolidated companies<br>from normal operations, after taxes | 815.2             | 685.6             |
| Earnings from nonconsolidated companies                                   | <u>98.2</u>       | <u>123.4</u>      |
| Group income from normal operations,<br>after taxes                       | 913.4             | 809.0             |
| Extraordinary gains   | 99.4              | 3.8               |
| Extraordinary losses  | <u>(167.5)</u>    | <u>(96.6)</u>     |
| Extraordinary items before taxes  | (68.1)            | (92.8)            |
| Taxes   | <u>70.6</u>       | <u>57.6</u>       |
| Extraordinary items after taxes   | <u>2.5</u>        | <u>(35.2)</u>     |
| Group income  | 915.9             | 773.8             |
| Minority interest   | <u>(72.9)</u>     | <u>(22.2)</u>     |
| Net income  | 843.0             | 751.6             |
| Salaries, wages, and social charges                                       | 4,641.4           | 4,292.4           |
| Depreciation of property, plant and equipment                             | 608.2             | 576.0             |

# Consolidated Statement of Changes in Financial Position of the Akzo Group

See notes on page 54.

| Millions of guilders                               | 1985         | 1984           | 49 |
|--|--------------|----------------|----|
| <b>Sources of Funds</b>                            |              |                |    |
| Group income                                       | 916          | 774            |    |
| Depreciation                                       | 608          | 576            |    |
| Income retained by nonconsolidated companies       | (52)         | (52)           |    |
| Changes in provisions                              | 246          | 205            |    |
| Other sources                                      | 5            | 83             |    |
|  | <u>1,723</u> | <u>1,586</u>   |    |
| <b>Applications of Funds</b>                       |              |                |    |
| Expenditures for property, plant and equipment     | 1,008        | 784            |    |
| Acquisitions                                       | 444          | 97             |    |
| Changes in other financial fixed assets            | (22)         | 6              |    |
| Disposal of interests                              | <u>(789)</u> | <u>(25)</u>    |    |
|  | 641          | 862            |    |
| Changes in working capital*                        | 197          | 157            |    |
| Dividends paid                                     | 259          | 163            |    |
| Other applications                                 | <u>18</u>    | <u>-</u>       |    |
|  | <u>1,115</u> | <u>1,182</u>   |    |
| <b>Balance of Funds Provided and Funds Used</b>    | <b>608</b>   | <b>404</b>     |    |
| Add to this balance the proceeds from:             |              |                |    |
| Issuance of stock                                  | 70           | 474            |    |
| Drawdowns  | 457          | 251            |    |
| Increase in short-term debt to credit institutions | <u>45</u>    | <u>89</u>      |    |
|  | 1,180        | 1,218          |    |
| These funds were appropriated as follows:          |              |                |    |
| Repayment of borrowings                            | <u>(762)</u> | <u>(1,357)</u> |    |
| <b>Change in Cash and Short-Term Investments</b>   | <b>418</b>   | <b>(139)</b>   |    |

\* Inventories and receivables less other current liabilities, exclusive of dividends.

# Notes to the Consolidated Financial Statements of the Akzo Group

50 General

## Affiliated Companies

The principal affiliated companies at December 31, 1985, are listed on pages 67 and 68.

A list of affiliated companies, drawn up in conformity with Book 2 of the Dutch Civil Code, section 379, paragraph 1, and using paragraph 3, has been filed at the Trade Registry of Arnhem.

## Changes in Consolidated Interests

Included in the 1985 consolidated financial statements are the

interests Akzo acquired in Litton Bionetics and the diagnostics division of Warner Lambert, both established in the United States, as well as the majority participation in Levis N.V., Belgium.

The consolidated figures also include the accounts of the merged activities of Akzo and Shell in the field of consumer products in Europe.

During 1985 the interests in CIRNE-Companhia Industrial do Rio Grande do Norte, Brazil, and in American Enka Corporation, United States, were sold; consequently these companies are no longer included in the consolidated balance sheet at December 31, 1985. There were no other material changes.

## Consolidated Balance Sheet

### Property, Plant and Equipment

| Millions of guilders                          | Total     | Buildings<br>and<br>land | Plant<br>equipment<br>and<br>machinery | Other<br>equipment | Construction<br>in progress<br>and prepaid<br>projects | Assets<br>not used<br>in the<br>production<br>process |
|---|-----------|--------------------------|--|--------------------|--|---|
| <b>Situation at December 31, 1984</b>         |           |                          |  |                    |  |   |
| Cost of acquisition                           | 12,271.5  | 2,576.4                  | 8,059.3                                | 917.3              | 408.3  | 310.2   |
| Depreciation                                  | (8,063.8) | (1,366.7)                | (5,812.2)                              | (638.6)            | —  | (246.3)   |
| Book value                                    | 4,207.7   | 1,209.7                  | 2,247.1                                | 278.7              | 408.3  | 63.9  |
| <b>Changes in book value</b>                  |           |                          |  |                    |  |   |
| Changes due to purchase and sale of interests | (421.9)   | (97.2)                   | (268.4)                                | (50.8)             | —  | (5.5)   |
| Capital expenditures                          | 1,007.7   | 136.1                    | 634.7                                  | 165.8              | 57.3   | 13.8  |
| Depreciation                                  | (608.2)   | (83.3)                   | (441.0)                                | (85.6)             | —  | 1.7   |
| Disposals                                     | (21.3)    | (6.1)                    | (7.4)                                  | (4.6)              | —  | (3.2)   |
| Additional write-offs                         | (25.7)    | (3.9)                    | (13.4)                                 | (0.9)              | —  | (7.5)   |
| Changes in exchange rates                     | (302.5)   | (92.0)                   | (182.4)                                | (24.7)             | —  | (3.4)   |
| Other changes                                 | 7.2       | 18.8                     | (17.3)                                 | 9.6                | —  | (3.9)   |
| Total changes in 1985                         | (364.7)   | (127.6)                  | (295.2)                                | 8.8                | 57.3   | (8.0)   |
| <b>Situation at December 31, 1985</b>         |           |                          |  |                    |  |   |
| Cost of acquisition                           | 10,680.9  | 2,239.0                  | 6,947.0                                | 828.6              | 465.6  | 200.7   |
| Depreciation                                  | (6,837.9) | (1,156.9)                | (4,995.1)                              | (541.1)            | —  | (144.8)   |
| Book value                                    | 3,843.0   | 1,082.1                  | 1,951.9                                | 287.5              | 465.6  | 55.9  |

The book value of property, plant and equipment financed by installment buying and leasing was approximately Hfl 54 million at December 31, 1985 (at December 31, 1984: approximately Hfl 45 million).

Given their comparatively slight magnitude, preparation and start-up expenses, carried at Hfl 8.3 million at December 31, 1985 (at December 31, 1984: Hfl 12.8 million), were included in property, plant and equipment.

**Financial Fixed Assets**

| Millions of guilders                  | Total        | Nonconsolidated companies | Loans to nonconsolidated companies | Other financial fixed assets |
|---------------------------------------|--------------|---------------------------|------------------------------------|------------------------------|
| Situation at December 31, 1984        | 610.5        | 418.5                     | 26.1                               | 165.9                        |
| Investments                           | 27.6         | 15.7                      | 1.5                                | 10.4                         |
| Disposals                             | (31.2)       | (1.0)                     |                                    | (30.2)                       |
| Equity in 1985 earnings               | 107.2        | 107.2                     |                                    |                              |
| Dividends received                    | (55.6)       | (55.6)                    |                                    |                              |
| Changes in exchange rates             | (27.3)       | (20.7)                    |                                    | (6.6)                        |
| Other changes                         | (9.4)        | (9.4)                     |                                    |                              |
| <b>Situation at December 31, 1985</b> | <b>621.8</b> | <b>454.7</b>              | <b>27.6</b>                        | <b>139.5</b>                 |

**Inventories**

| Millions of guilders, December 31      | 1985           | 1984           |
|--|----------------|----------------|
| Raw materials and supplies             | 682.4          | 738.7          |
| Work in process                        | 609.1          | 586.7          |
| Finished products and goods for resale | 1,388.0        | 1,317.9        |
| Inventory prepayments                  | 11.4           | 9.9            |
|  | <b>2,690.9</b> | <b>2,653.2</b> |

**Receivables**

| Millions of guilders, December 31          | 1985           | 1984           |
|--|----------------|----------------|
| Trade receivables                          | 2,682.4        | 2,630.6        |
| Receivables from nonconsolidated companies | 80.9           | 90.3           |
| Other receivables                          | 611.2          | 490.0          |
|  | <b>3,374.5</b> | <b>3,210.9</b> |
| Discounted portion                         | (259.9)        | (318.0)        |
|  | <b>3,114.6</b> | <b>2,892.9</b> |

**Cash and Short-Term Investments**

| Millions of guilders, December 31 | 1985           | 1984           |
|-----------------------------------|----------------|----------------|
| Short-term investments            | 1,370.3        | 877.8          |
| Cash on hand and in banks         | 114.7          | 189.1          |
|                                   | <b>1,485.0</b> | <b>1,066.9</b> |

The short-term investments include cash loans, time deposits, marketable private borrowings, and marketable securities, which are virtually all listed on stock exchanges.

**Credit Facilities**

The total amount of medium- and long-term credit facilities arranged by Akzo but not yet utilized was approximately Hfl 680 million at December 31, 1985 (at December 31, 1984: approximately Hfl 780 million).

**Group Equity**

| Millions of guilders                            | Group equity   | Minority interest |
|---|----------------|-------------------|
| Situation at December 31, 1984                  | 4,184.1        | 169.6             |
| Issuance of stock                               | 70.2           | 30.5              |
| Retained earnings                               | 628.7          | 48.1              |
| Changes in minority interest in Group companies | 158.5          | 158.5             |
| Goodwill  | (257.5)        | (40.6)            |
| Changes in exchange rates                       | (289.3)        | (13.0)            |
| <b>Situation at December 31, 1985</b>           | <b>4,494.7</b> | <b>353.1</b>      |

For details on changes in Akzo N.V. stockholders' equity see the note to the Akzo N.V. balance sheet on page 58.

**Provisions**

| Millions of guilders, December 31 | 1985           | 1984           |
|-----------------------------------|----------------|----------------|
| Deferred taxes                    | 330.0          | 289.1          |
| Pension rights                    | 865.3          | 733.6          |
| Other provisions                  | 807.7          | 706.6          |
|                                   | <b>2,003.0</b> | <b>1,729.3</b> |

The current portion of provisions amounted to approximately Hfl 213 million (at December 31, 1984: approximately Hfl 168 million).

*Provisions in respect of pension rights*

Most Group companies have arranged appropriate pension plans for their employees, with due observance of the statutory regulations and customs in the countries concerned. The provisions in respect of pension rights relate to rights not covered by independent pension funds or by third parties. At December 31, 1985, as at December 31, 1984, the accumulated pension benefits were on balance fully covered by these provisions and by contributions paid into independent pension funds or to third parties.

*Other provisions*

The principal provisions are for the restructuring of activities. Other provisions also include amounts in respect of guarantees, and amounts providing coverage for losses, not otherwise insured, contingent upon the outcome of litigation.

**Subordinated Loans**

This item is composed of the amounts borrowed in respect of subordinated loans arranged by Akzo Nederland B.V., together with either Enka B.V. or Akzo Zout Chemie Nederland B.V. Akzo N.V. has agreed to be jointly and severally liable for these loans. They are subordinated to all third-party debts of the companies named.

The interest rate averaged 11.2% (1984: 11.1%). Repayment is scheduled to be made in 1986 (Hfl 18.0 million), 1987 through 1990 (Hfl 83.6 million), and after 1990 (Hfl 82.9 million).

**Other Long-Term Debt**

| Millions of guilders, December 31 | 1985           | 1984           |
|-----------------------------------|----------------|----------------|
| Convertible debentures            | 60.6           | 125.5          |
| Other debentures                  |                |                |
| Issued by Akzo N.V.               | 422.5          | 625.7          |
| Issued by consolidated companies  | 90.3           | 160.2          |
| Private borrowings                | 487.9          | 466.5          |
| Debt to credit institutions       | 459.4          | 656.0          |
| Other debt                        | 157.4          | 135.4          |
|                                   | <b>1,678.1</b> | <b>2,169.3</b> |

Aggregate maturities are as follows:

| Millions of guilders             | 1986         | 1987-1990    | after 1990   |
|----------------------------------|--------------|--------------|--------------|
| Convertible debentures           | 0.7          | 59.9         |              |
| Other debentures                 |              |              |              |
| Issued by Akzo N.V.              | 58.6         | 210.7        | 153.2        |
| Issued by consolidated companies | 3.0          | 3.1          | 84.2         |
| Private borrowings               | 109.1        | 269.7        | 109.1        |
| Debt to credit institutions      | 58.4         | 368.5        | 32.5         |
| Other debt                       | 44.1         | 72.4         | 40.9         |
|                                  | <b>273.9</b> | <b>984.3</b> | <b>419.9</b> |

The average interest rate was 8.4% (1984: 8.8%).

Private borrowings and debt to credit institutions have been secured to an aggregate amount of Hfl 107 million (at December 31, 1984: Hfl 122 million) by means of mortgages, etc.

For details on convertible debentures and other debentures issued by Akzo N.V. see the notes to the Akzo N.V. balance sheet on page 58.

**Other Current Liabilities**

| Millions of guilders, December 31       | 1985           | 1984           |
|---|----------------|----------------|
| Prepayments by customers                | 76.5           | 48.4           |
| Debt to suppliers                       | 1,415.5        | 1,333.4        |
| Debt to nonconsolidated companies       | 45.1           | 41.1           |
| Taxes and social security contributions | 396.3          | 349.3          |
| Dividends                               | 205.3          | 179.0          |
| Pensions                                | 45.6           | 25.0           |
| Other liabilities                       | 771.9          | 739.9          |
|   | <b>2,956.2</b> | <b>2,716.1</b> |

**Commitments and Contingent Liabilities**

There are pending against companies of the Akzo Group a number of claims and lawsuits arising in the normal course of business with respect to commercial matters and governmental regulations. All such claims are contested. While the results of litigation cannot be predicted with certainty, management believes, in part based upon legal advice, that the final outcome of such litigation will not materially affect the consolidated financial position of the Akzo Group.

Purchase commitments for property, plant and equipment aggregated Hfl 266 million at December 31, 1985 (at December 31, 1984: Hfl 168 million). In addition, the Company has purchase commitments for raw materials and supplies incident to the ordinary conduct of business.

In respect of leasehold, rental, operating leases, etc., long-term liabilities were contracted in the aggregate amount of Hfl 349 million (1984: Hfl 449 million).

In the coming years these liabilities will fall due as follows:

|            |                 |
|------------|-----------------|
| 1986       | Hfl 58 million  |
| 1987-1990  | Hfl 191 million |
| after 1990 | Hfl 100 million |

Guarantees in behalf of nonconsolidated companies and third parties totaled Hfl 245 million (at December 31, 1984: Hfl 252 million).

As general partners of several partnerships, companies of the Akzo Group are liable for obligations incurred by the partnerships. These obligations, exclusive of debt to, or debt guaranteed by, other Group companies, aggregated Hfl 463 million (at December 31, 1984: Hfl 334 million).

In December 1985, Akzo Coatings PLC made a public conditional offer of £ 2.00 per share for the outstanding shares of Blundell-Permoglaze Holdings PLC, United Kingdom. The ensuing contingent liability amounted to £ 11.7 million at December 31, 1985.

**Net Sales***Product groups*

| Millions of guilders   | 1985   | 1984   |
|------------------------|--------|--------|
| Man-made fibers        | 5,226  | 5,035  |
| Chemical products      | 5,155  | 4,800  |
| Coatings               | 2,171  | 1,973  |
| Pharmaceuticals        | 2,138  | 1,849  |
| Consumer products      | 1,677  | 1,302  |
| Miscellaneous products | 1,903  | 1,826  |
|                        | 18,270 | 16,785 |
| Intra-Group deliveries | (260)  | (265)  |
|                        | 18,010 | 16,520 |

*Areas of destination*

| Millions of guilders        | 1985   | 1984   |
|-----------------------------|--------|--------|
| The Netherlands             | 1,988  | 1,836  |
| Federal Republic of Germany | 2,605  | 2,493  |
| Other EEC countries         | 4,618  | 3,991  |
| Rest of Europe              | 2,121  | 1,911  |
| North America               | 3,923  | 3,781  |
| Other regions               | 2,755  | 2,508  |
|                             | 18,010 | 16,520 |

**Financing Charges**

Interest paid decreased by Hfl 30 million (1984: Hfl 29 million) due to the capitalization of financing expenses of capital investment projects under construction.

**Taxes on Operating Income less Financing Charges**

Taxes averaged 36% (1984: 35%). Because of loss compensation facilities a portion of income was not included in taxable income.

**Earnings from Nonconsolidated Companies**

Earnings from nonconsolidated companies are net of taxes in the amount of Hfl 17.8 million (1984: Hfl 28.3 million).

**Extraordinary Items**

On balance, extraordinary items showed a gain after taxes of Hfl 2.5 million, which was largely attributable to the divestiture of certain interests and the creation of various provisions.

**Salaries, Wages, and Social Charges**

| Millions of guilders | 1985    | 1984    |
|----------------------|---------|---------|
| Salaries and wages   | 3,586.2 | 3,354.6 |
| Pension costs        | 377.6   | 370.4   |
| Other social charges | 677.6   | 567.4   |
|                      | 4,641.4 | 4,292.4 |

**Employees**

| Average number of employees        | 1985   | 1984   |
|------------------------------------|--------|--------|
| Enka                               | 28,300 | 27,900 |
| Akzo Zout Chemie                   | 4,100  | 4,600  |
| Akzo Chemie                        | 5,000  | 4,900  |
| Akzo Coatings                      | 9,300  | 8,500  |
| Akzo Pharma                        | 10,000 | 9,300  |
| Akzo Consumenten Produkten         | 3,700  | 3,100  |
| Other companies                    | 7,200  | 7,900  |
|                                    | 67,600 | 66,200 |
| Number of employees at December 31 | 65,000 | 66,100 |

54 Consolidated Statement of Changes in Financial Position

This statement provides data on sources and applications of funds and on the Company's financing activities. It is based on a comparison of initial and final balance sheet

amounts, in which currency translation differences, changes in investments in affiliated companies, etc. are eliminated. For some items the elimination can be derived directly from the notes to the balance sheet. For certain other items the elimination is shown below.

| Millions of guilders                           | Working capital* | Provisions | Long-term debt | Short-term debt to credit institutions |
|--|------------------|------------|----------------|--|
| Changes in 1985 balance sheet items            | 47               | 274        | (509)          | 9                                      |
| Eliminations:                                  |                  |            |                |  |
| Changes in exchange rates                      | 198              | 55         | 180            | 35                                     |
| Changes in investments in affiliated companies | (48)             | (83)       | (3)            | 1                                      |
| Other changes                                  |                  |            | 27             |  |
| Changes in 1985 financial position             | 197              | 246        | (305)**        | 45                                     |

\* Inventories and receivables less other current liabilities, exclusive of dividends.

\*\* Balance of repayment of borrowings (Hfl 762 million) and drawdowns (Hfl 457 million).

**Acquisitions**

| Millions of guilders                     | 1985 | 1984 |
|--|------|------|
| Investments in nonconsolidated companies | 17   | 9    |
| Acquisition of consolidated companies    | 427  | 88   |
|  | 444  | 97   |

**Disposal of interests**

This item principally relates to the sale of American Enka to BASF Corporation. It also includes the effect of the transfer of the 49% interest in Akzo Consumenten Produkten to Shell.

# Supplementary Information on the Basis of Current Value

In the valuation and determination of income on the basis of current value the following additional accounting policies are used:

*Property, plant and equipment*

- The current value of land is approximated on the basis of appraisals.
- The current value of the other property, plant and equipment is computed using indexes from external sources in the principal countries of establishment, with adjustments for the estimated decrease in value as a result of technological advances. In cases where the current value exceeds the value to the business, the latter value is used.
- Deferred taxes resulting from the revaluation of property, plant and equipment not yet realized are shown under provisions.
- To calculate depreciation on the basis of current value the same percentages are used as for depreciation on the basis of historical cost.

- The difference between depreciation on the basis of current value and depreciation on the basis of historical cost is treated as additional depreciation.

*Inventories*

- Inventories are shown at historical cost, unless there is a material difference with the current value at the balance sheet date.
- The difference between current value and historical cost of the inventories consumed is treated as inventory results.

*Gearing adjustment*

- To the extent that fixed assets and inventories are considered to be financed with debt, additional depreciation and inventory results are not charged against net income.

**Condensed Consolidated Balance Sheet**

| Millions of guilders, December 31            | 1985          | 1984          |
|--|---------------|---------------|
| <b>Assets</b>                                |               |               |
| Fixed assets on the basis of historical cost | 4,465         | 4,818         |
| Revaluation of fixed assets                  | <u>1,409</u>  | <u>1,564</u>  |
| Fixed assets on the basis of current value   | 5,874         | 6,382         |
| Current assets                               | 7,290         | 6,613         |
| <b>Total</b>                                 | <b>13,164</b> | <b>12,995</b> |

**Group Equity and Liabilities**

|                      |               |               |
|----------------------|---------------|---------------|
| Stockholders' equity | 4,907         | 4,870         |
| Minority interest    | 404           | 212           |
| Group equity         | <u>5,311</u>  | <u>5,082</u>  |
| Provisions           | 2,596         | 2,395         |
| Debt                 | 5,257         | 5,518         |
| <b>Total</b>         | <b>13,164</b> | <b>12,995</b> |

**Summarized Consolidated Income Data**

| Millions of guilders  | 1985         | 1984         |
|---|--------------|--------------|
| Net sales   | 18,010       | 16,520       |
| Operating income on the basis of historical cost                | 1,465        | 1,340        |
| Adjustment of operating income to current value                 |              |              |
| Inventory results   | (43)         | (54)         |
| Additional depreciation   | <u>(133)</u> | <u>(141)</u> |
| Operating income on the basis of current value                  | 1,289        | 1,145        |
| As percentage of net sales                                      | 7.2          | 6.9          |
| Net income on the basis of historical cost                      | 843          | 752          |
| Adjustment of operating income to current value                 | (176)        | (195)        |
| Gearing adjustment  | 72           | 93           |
| Adjustments for nonconsolidated companies and minority interest | <u>(4)</u>   | <u>(5)</u>   |
| Net income on the basis of current value                        | 735          | 645          |

# Akzo N.V. Balance Sheet

after allocation of profit

See notes on pages 57 through 59.

| 56 Millions of guilders, December 31        | 1985           | 1984           |
|---|----------------|----------------|
| <b>Assets</b>                               |                |                |
| Fixed assets                                |                |                |
| Financial fixed assets                      | 5,193.2        | 5,460.2        |
| Current assets                              |                |                |
| Receivables                                 | 135.5          | 171.3          |
| Cash and short-term investments             | <u>880.1</u>   | <u>862.2</u>   |
|   | 1,015.6        | 1,033.5        |
| <b>Total</b>                                | <b>6,208.8</b> | <b>6,493.7</b> |
| <b>Stockholders' Equity and Liabilities</b> |                |                |
| Stockholders' equity                        |                |                |
| Subscribed stock                            | 795.7          | 789.2          |
| Additional paid-in capital                  | 1,120.3        | 1,087.1        |
| Statutory reserves                          | 635.8          | 346.7          |
| Other reserves                              | <u>1,589.8</u> | <u>1,791.5</u> |
|   | 4,141.6        | 4,014.5        |
| Long-term debt                              | 1,605.0        | 2,159.5        |
| Current liabilities                         | 462.2          | 319.7          |
| <b>Total</b>                                | <b>6,208.8</b> | <b>6,493.7</b> |

# Akzo N.V. Statement of Income

See notes on page 59.

| Millions of guilders                 | 1985         | 1984          |
|--------------------------------------|--------------|---------------|
| Net income from affiliated companies | 833.2        | 814.6         |
| Other net income                     | <u>9.8</u>   | <u>(63.0)</u> |
| Net income for the fiscal year       | <b>843.0</b> | <b>751.6</b>  |

# Notes to Akzo N.V. Balance Sheet and Statement of Income

## General

Foreign currency has been translated, assets and liabilities have been valued, and net income has been determined, in accordance with the principles of valuation and determination of income set forth on pages 45 and 46.

Thus stockholders' equity and net income are equal to stockholders' equity and net income as shown in the consolidated

financial statements on pages 47 and 48.

As the financial data of Akzo N.V. are included in the consolidated financial statements of the Akzo Group, the statement of income of Akzo N.V. is condensed in conformity with Book 2 of the Dutch Civil Code, section 402.

## Balance Sheet

### Financial Fixed Assets

| Millions of guilders                  | Total          | Consolidated companies |                | Nonconsolidated companies |            | Other financial fixed assets |
|---------------------------------------|----------------|------------------------|----------------|---------------------------|------------|------------------------------|
|                                       |                | Share in capital       | Loans          | Share in capital          | Loans      |                              |
| Situation at December 31, 1984        | 5,460.2        | 4,061.0                | 1,280.0        | 105.0                     | 0.8        | 13.4                         |
| Disinvestments/investments            | (71.2)         | (85.5)                 |                |                           |            | 14.3                         |
| Equity in 1985 earnings               | 833.2          | 765.1                  |                | 68.1                      |            |                              |
| Dividends received                    | (544.1)        | (526.7)                |                | (17.4)                    |            |                              |
| Loans granted                         | 519.1          |                        | 516.6          |                           | 2.5        |                              |
| Repayment of loans                    | (510.8)        |                        | (498.2)        |                           | (0.2)      | (12.4)                       |
| Changes in exchange rates             | (276.3)        | (213.8)                | (49.7)         | (12.8)                    |            |                              |
| Goodwill                              | (216.9)        | (216.9)                |                |                           |            |                              |
| <b>Situation at December 31, 1985</b> | <b>5,193.2</b> | <b>3,783.2</b>         | <b>1,248.7</b> | <b>142.9</b>              | <b>3.1</b> | <b>15.3</b>                  |

Loans to consolidated companies have no fixed repayment schedule.

### Receivables

| Millions of guilders, December 31          | 1985         | 1984         |
|--|--------------|--------------|
| Receivables from consolidated companies    | 61.4         | 67.0         |
| Receivables from nonconsolidated companies | 0.3          | —            |
| Other receivables                          | 73.8         | 104.3        |
|  | <b>135.5</b> | <b>171.3</b> |

### Cash and Short-Term Investments

| Millions of guilders, December 31 | 1985         | 1984         |
|-----------------------------------|--------------|--------------|
| Short-term investments            | 853.1        | 852.2        |
| Cash on hand and in banks         | 27.0         | 10.0         |
|                                   | <b>880.1</b> | <b>862.2</b> |

58 **Stockholders' Equity**

| Millions of guilders   | Subscribed stock | Additional paid-in capital | Statutory reserves | Other reserves | Stockholders' equity |
|--|------------------|----------------------------|--------------------|----------------|----------------------|
| Situation at December 31, 1984                                       | 789.2            | 1,087.1                    | 346.7              | 1,791.5        | 4,014.5              |
| Issuance of common stock due to conversion of convertible debentures | 6.5              | 33.2                       |                    |                | 39.7                 |
| Retained earnings  |                  |                            | 289.1              | 291.5          | 580.6                |
| Goodwill   |                  |                            |                    | (216.9)        | (216.9)              |
| Changes in exchange rates in respect of affiliated companies         |                  |                            |                    | (276.3)        | (276.3)              |
| <b>Situation at December 31, 1985</b>                                | <b>795.7</b>     | <b>1,120.3</b>             | <b>635.8</b>       | <b>1,589.8</b> | <b>4,141.6</b>       |

*Subscribed stock*

Authorized capital stock of Akzo N.V. is Hfl 1,030,048,000 and consists of 48 shares of priority stock of Hfl 1,000 each, 30,000 shares of cumulative preferred stock of Hfl 1,000 each, and 50 million shares of common stock of Hfl 20 each. Subscribed stock consists of 48 shares of priority stock, 602 shares of cumulative preferred stock, and 39,754,603 shares of common stock.

*Additional paid-in capital*

At least Hfl 678 million of additional paid-in capital (at December 31, 1984: Hfl 645 million) can be considered free from income tax within the meaning of the Dutch 1964 Income Tax Law (Wet op de Inkomstenbelasting 1964).

*Statutory reserves*

This includes the statutory reserve relating to the earnings retained by affiliated companies after 1983.

**Long-Term Debt**

| Millions of guilders, December 31 | 1985           | 1984           |
|-----------------------------------|----------------|----------------|
| Convertible debentures            | 60.6           | 125.5          |
| Other debentures                  | 422.5          | 625.7          |
| Debt to consolidated companies    | 824.7          | 1,226.1        |
| Private borrowings                | 291.6          | 172.0          |
| Debt to credit institutions       | 5.6            | 10.2           |
|                                   | <b>1,605.0</b> | <b>2,159.5</b> |

*Convertible debentures*

4¾% debentures Akzo N.V. 1969 convertible into Akzo N.V. common stock, payable 1986/1989. The amount outstanding at December 31, 1985, was U.S.\$ 16.9 million. The conversion price is Hfl 121.60 per share of Hfl 20, based on an exchange rate of U.S.\$ 1 = Hfl 3.60.

*Other debentures*

| Millions of guilders, December 31 | 1985         | 1984         |
|-----------------------------------|--------------|--------------|
| 9¼% 1976 due 1982/1986            | 25.0         | 50.0         |
| 9½% 1979 due 1983/1986            | 31.2         | 62.5         |
| 9¼% 1979/1987 (Flux 380 million)  | 19.3         | 21.5         |
| 9% 1980/1990 (DM 125 million)     | -            | 141.1        |
| 9½% 1982/1989 (DM 100 million)    | 112.6        | 112.9        |
| 10¼% 1982 due 1988/1992           | 100.0        | 100.0        |
| 5% 1983-93 (Sfr 100 million)      | 133.7        | 137.0        |
| Employee debentures               | 0.7          | 0.7          |
|                                   | <b>422.5</b> | <b>625.7</b> |

*Debt to consolidated companies*

Borrowings from these companies have no fixed repayment schedule. Part of these borrowings do not bear interest. To the extent that interest is charged, it averaged 6.9% in 1985 (1984: 6.5%).

*Private borrowings and debt to credit institutions*

Aggregate maturities are as follows:

| Millions of guilders        | 1986        | 1987-1990    | after 1990 |
|-----------------------------|-------------|--------------|------------|
| Private borrowings          | 86.2        | 204.6        | 0.8        |
| Debt to credit institutions | 2.4         | 3.2          | -          |
|                             | <b>88.6</b> | <b>207.8</b> | <b>0.8</b> |

The average rate of interest was 7.6% (1984: 8.4%).

**Current Liabilities**

| Millions of guilders, December 31       | 1985         | 1984         |
|---|--------------|--------------|
| Debt to credit institutions             | 110.7        | 48.0         |
| Debt to consolidated companies          | 83.9         | 26.5         |
| Taxes and social security contributions | 11.5         | 2.7          |
| Dividend                                | 202.8        | 177.4        |
| Other liabilities                       | 53.3         | 65.1         |
|   | <b>462.2</b> | <b>319.7</b> |

**Liabilities Not Shown in the Balance Sheet***Joint and several liability; guarantees*

Akzo N.V. has declared in writing that it accepts joint and several liability for contractual debts of Dutch consolidated companies. These debts, at December 31, 1985 aggregating approximately Hfl 1.6 billion (at December 31, 1984: Hfl 1.5 billion), are included in the consolidated balance sheet of the Akzo Group. Additionally, guarantees were issued in behalf of consolidated companies in the amount of Hfl 770 million (1984: Hfl 608 million), and in behalf of nonconsolidated companies and third parties in the amount of Hfl 108 million (1984: Hfl 124 million).

**Statement of Income****Net Income from Affiliated Companies**

Net income from affiliated companies concerns Akzo's share in the earnings of its affiliates.

**Remuneration of Members of the Board of Management and of the Supervisory Council of Akzo N.V.**

In fiscal 1985, remuneration including pension expense amounted to Hfl 4,448,310 (1984: Hfl 4,416,264) for members and former members of the Board of Management, and to Hfl 569,764 (1984: Hfl 644,100) for members and former members of the Supervisory Council. These amounts were charged to Akzo Group income.

Arnhem, March 7, 1986

## The Board of Management

A.A. Loudon  
J. Veldman  
H.J.J. van der Werf  
H.G. Zempelin

## The Supervisory Council

G. Kraijenhoff  
A. Herrhausen  
E.G.G. Werner  
A. Batenburg  
A.G. van den Bos  
F.H. Fentener van Vlissingen  
H.J. Schlange-Schöningen  
H.A. van Stiphout  
C. van Veen  
O. Wolff von Amerongen

## Other Information

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### 60 **Auditors' Report**

We have examined the foregoing 1985 financial statements of Akzo N.V., Arnhem.

In our opinion, these financial statements present fairly the financial position of Akzo N.V. at December 31, 1985, and the results of its operations for the year then ended.

Arnhem, March 7, 1986

KMG Klynveld Kraayenhof & Co.

**Provisions of the Articles of Association with regard to Profit Allocation**

**Article 39**

1  
The Board of Management shall be authorized to determine, with the approval of the Supervisory Council, how great a share of the profit as shown by the approved statement of income shall be added to reserves; the general meeting of shareholders may dispose of such reserves only on the proposal of the Board of Management approved by the Supervisory Council. The remainder of the profits shall be put at the disposal of the general meeting of shareholders, with due observance of the provisions in paragraph 2.

2  
The remainder of the profits shall, to the extent possible, be allocated as follows:

a  
to the holders of priority shares:  
six per cent per share or the statutory interest as stated in article 8,

paragraph 1, whichever is lower, plus any accrued and unpaid dividends;

b  
to the holders of cumulative preferred shares:  
six per cent per share, plus any accrued and unpaid dividends;

c  
to the holders of ordinary shares:  
a dividend of such an amount per share as the remaining profit, less the aforesaid payments and less such amounts as the general meeting of shareholders may decide to carry to reserves, shall permit.

3  
The holders of ordinary shares are, to the exclusion of everyone else, entitled to allocations made from reserves accrued by virtue of the provision of the second paragraph sub c.

4  
The right to receive dividends and interim dividends shall lapse six years after such dividends and interim dividends have been made payable.

**Proposal for Profit Allocation**

Amounts in guilders

1985

Net income 843,000,000

With due observance of art. 39, para 2, of the articles of association, it is proposed that this amount be allocated as follows:

To be distributed:

|  |                    |
|--|--------------------|
| dividend on priority stock – Hfl 60 per share of Hfl 1,000   | 2,880              |
| dividend on cum. pref. stock – Hfl 60 per share of Hfl 1,000 | 36,120             |
| dividend on common stock – Hfl 6.60 per share of Hfl 20      | <u>262,380,380</u> |

262,419,380

To be retained

580,580,620

for addition to statutory reserves  
for addition to other reserves

289,100,000  
291,480,620

Following the acceptance of this proposal, the holders of common stock will receive a final dividend of Hfl 5.10 per share of Hfl 20, while Hfl 1.50 was paid earlier as an interim dividend.

The final dividend will be made available on dividend coupon No. 25 from May 13, 1986.

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62 **Special Rights to Holders of Priority Stock**

The priority stock is held by "Akzo-stichting" (Akzo Foundation), which is controlled by the members of the Supervisory Council and the Board of Management.

The meeting of holders of priority stock has the right to draw up binding lists of nominees for appointment to the Supervisory Council and the Board of Management.

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**Balance Sheets, with Notes, of Dutch Partnerships**  
("Vennootschappen onder firma")

Akzo Group companies are general partners in the following partnerships:

|  |     |
|--|-----|
| Aramide Maatschappij v.o.f., Emmen               | 50% |
| Glucona v.o.f., Ter Apelkanaal                   | 50% |
| Methanol Chemie Nederland v.o.f., Delfzijl (MCN) | 50% |
| Methanor v.o.f., Delfzijl                        | 30% |
| ROVIN Rotterdamse Vinylunie v.o.f., Amsterdam    | 50% |

The percentages indicate Akzo Group interest in the above companies.

In conformity with Book 2 of the Dutch Civil Code, section 379, paragraph 4, the Minister of Economic Affairs has granted an exemption for Aramide Maatschappij v.o.f., Emmen, for the years 1985 and 1986, as contemplated in Book 2 of the Dutch Civil Code, section 392, paragraph 5.

The data of the other Dutch partnerships are of negligible significance for a proper understanding of the financial statements.

# Ten-Year Financial Summary

Where necessary, figures for the years prior to 1984 have been restated to conform with the accounting policies used since 1984.

In the computation of ratios, the amounts used for invested capital and stockholders' equity represent averages of the amounts at January 1 and December 31 of the year.

| Consolidated Balance Sheet, December 31 | 1985   | 1984   | 1983   | 1982   | 1981   | 1980  | 1979  | 1978  | 1977  | 1976  | 63 |
|---|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|----|
| <i>Millions of guilders</i>             |        |        |        |        |        |       |       |       |       |       |    |
| Property, plant and equipment           | 3,843  | 4,208  | 3,840  | 3,911  | 3,673  | 3,441 | 3,273 | 3,360 | 3,577 | 3,904 |    |
| Financial fixed assets                  | 622    | 610    | 611    | 499    | 532    | 525   | 493   | 537   | 513   | 504   |    |
| Fixed assets                            | 4,465  | 4,818  | 4,451  | 4,410  | 4,205  | 3,966 | 3,766 | 3,897 | 4,090 | 4,408 |    |
| Inventories                             | 2,691  | 2,653  | 2,457  | 2,542  | 2,506  | 2,454 | 2,233 | 1,902 | 1,920 | 1,949 |    |
| Receivables                             | 3,114  | 2,893  | 2,701  | 2,339  | 2,587  | 2,308 | 2,225 | 1,993 | 1,898 | 1,792 |    |
| Cash and short-term investments         | 1,485  | 1,067  | 1,206  | 778    | 898    | 883   | 805   | 598   | 580   | 611   |    |
| Current assets                          | 7,290  | 6,613  | 6,364  | 5,659  | 5,991  | 5,645 | 5,263 | 4,493 | 4,398 | 4,352 |    |
| Total assets                            | 11,755 | 11,431 | 10,815 | 10,069 | 10,196 | 9,611 | 9,029 | 8,390 | 8,488 | 8,760 |    |
| Subscribed capital                      | 796    | 789    | 664    | 593    | 593    | 593   | 593   | 593   | 593   | 593   |    |
| Additional paid-in capital              | 1,120  | 1,087  | 740    | 658    | 658    | 658   | 658   | 658   | 658   | 658   |    |
| Statutory reserves                      | 636    | 347    | —      | —      | —      | —     | —     | —     | —     | —     |    |
| Other reserves                          | 1,590  | 1,791  | 1,563  | 1,237  | 1,198  | 1,015 | 1,074 | 980   | 1,074 | 1,377 |    |
| Stockholders' equity                    | 4,142  | 4,014  | 2,967  | 2,488  | 2,449  | 2,266 | 2,325 | 2,231 | 2,325 | 2,628 |    |
| Minority interest                       | 353    | 170    | 120    | 122    | 407    | 393   | 408   | 397   | 414   | 486   |    |
| Group equity                            | 4,495  | 4,184  | 3,087  | 2,610  | 2,856  | 2,659 | 2,733 | 2,628 | 2,739 | 3,114 |    |
| Provisions                              | 2,003  | 1,729  | 1,535  | 1,427  | 1,335  | 1,329 | 1,147 | 1,054 | 1,039 | 942   |    |
| Subordinated loans                      | 184    | 203    | 221    | 175    | 75     | 25    | —     | —     | —     | —     |    |
| Other long-term debt                    | 1,678  | 2,169  | 3,132  | 3,227  | 3,114  | 3,072 | 2,842 | 2,645 | 2,790 | 2,947 |    |
| Long-term debt                          | 1,862  | 2,372  | 3,353  | 3,402  | 3,189  | 3,097 | 2,842 | 2,645 | 2,790 | 2,947 |    |
| Debt to credit institutions             | 439    | 430    | 349    | 571    | 613    | 574   | 453   | 386   | 347   | 310   |    |
| Other current liabilities               | 2,956  | 2,716  | 2,491  | 2,059  | 2,203  | 1,952 | 1,854 | 1,677 | 1,573 | 1,447 |    |
| Current liabilities                     | 3,395  | 3,146  | 2,840  | 2,630  | 2,816  | 2,526 | 2,307 | 2,063 | 1,920 | 1,757 |    |
| Total Group equity and liabilities      | 11,755 | 11,431 | 10,815 | 10,069 | 10,196 | 9,611 | 9,029 | 8,390 | 8,488 | 8,760 |    |
| Invested capital*:                      |        |        |        |        |        |       |       |       |       |       |    |
| Of consolidated companies               | 6,832  | 7,203  | 6,666  | 6,881  | 6,744  | 6,418 | 6,074 | 5,777 | 6,014 | 6,415 |    |
| In nonconsolidated companies            | 482    | 445    | 452    | 351    | 351    | 357   | 297   | 338   | 321   | 288   |    |
| Total                                   | 7,314  | 7,648  | 7,118  | 7,232  | 7,095  | 6,775 | 6,371 | 6,115 | 6,335 | 6,703 |    |
| Property, plant and equipment           |        |        |        |        |        |       |       |       |       |       |    |
| Capital expenditures                    | 1,008  | 784    | 625    | 730    | 693    | 645   | 461   | 434   | 409   | 413   |    |
| Depreciation                            | 608    | 576    | 584    | 533    | 527    | 504   | 506   | 486   | 494   | 533   |    |
| <i>Ratios</i>                           |        |        |        |        |        |       |       |       |       |       |    |
| Net sales : invested capital            | 2.57   | 2.38   | 2.23   | 2.08   | 2.20   | 1.99  | 2.03  | 1.81  | 1.68  | 1.60  |    |
| Group equity : debt                     | 0.62   | 0.58   | 0.40   | 0.35   | 0.39   | 0.38  | 0.43  | 0.46  | 0.48  | 0.55  |    |
| Group equity : fixed assets             | 1.01   | 0.87   | 0.69   | 0.59   | 0.68   | 0.67  | 0.73  | 0.67  | 0.67  | 0.71  |    |
| Current assets : current liabilities    | 2.15   | 2.10   | 2.24   | 2.15   | 2.13   | 2.23  | 2.28  | 2.18  | 2.29  | 2.48  |    |

\* Total assets less cash and short-term investments, and less other current liabilities.

| 64 | Consolidated Statement of Income                                | 1985        | 1984        | 1983        | 1982        | 1981        | 1980        | 1979        | 1978        | 1977        | 1976        |
|----|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|    | <i>Millions of guilders</i>                                     |             |             |             |             |             |             |             |             |             |             |
|    | Net sales   | 18,010      | 16,520      | 15,085      | 14,154      | 14,476      | 12,453      | 12,015      | 10,666      | 10,433      | 10,750      |
|    | Operating income  | 1,465       | 1,340       | 843         | 493         | 564         | 416         | 689         | 421         | 240         | 305         |
|    | Financing charges   | (185)       | (285)       | (341)       | (297)       | (329)       | (261)       | (259)       | (248)       | (245)       | (249)       |
|    | Taxes on operating income less financing charges                | (465)       | (369)       | (73)        | (28)        | (79)        | (48)        | (136)       | (113)       | (65)        | (59)        |
|    | Equity in earnings of nonconsolidated companies                 | 98          | 123         | 110         | 59          | 83          | 72          | 32          | 28          | 34          | 24          |
|    | Group income from normal operations, after taxes                | 913         | 809         | 539         | 227         | 239         | 179         | 326         | 88          | (36)        | 21          |
|    | Extraordinary items after taxes                                 | 3           | (35)        | (102)       | (49)        | 7           | (246)       | (60)        | (25)        | (122)       | (167)       |
|    | Group income  | 916         | 774         | 437         | 178         | 246         | (67)        | 266         | 63          | (158)       | (146)       |
|    | Minority interest   | (73)        | (22)        | (9)         | (13)        | (7)         | (3)         | (36)        | (39)        | (8)         | (7)         |
|    | Net income  | 843         | 752         | 428         | 165         | 239         | (70)        | 230         | 24          | (166)       | (153)       |
|    | Common stock, in thousands of shares of Hfl 20                  | 39,755      | 39,427      | 33,151      | 29,594      | 29,594      | 29,594      | 29,594      | 29,594      | 29,594      | 29,594      |
|    | Dividend  | 262         | 236         | 133         | 47*         | 59          | —           | 71          | —           | —           | —           |
|    | <i>Per common share of Hfl 20, in guilders</i>                  |             |             |             |             |             |             |             |             |             |             |
|    | Net income  | 21.21       | 19.06       | 12.91       | 5.56        | 8.07        | (2.35)      | 7.74        | 0.82        | (5.63)      | (5.16)      |
|    | Dividend  | 6.60        | 6.00        | 4.00        | 1.60        | 2.00        | —           | 2.40        | —           | —           | —           |
|    | Stockholders' equity  | 104.16      | 101.80      | 89.48       | 84.06       | 82.72       | 76.56       | 78.55       | 75.35       | 78.52       | 88.78       |
|    | Adjusted for common stock issues                                |             |             |             |             |             |             |             |             |             |             |
|    | Net income  | 21.21       | 19.06       | 12.85       | 5.29        | 7.67        | (2.23)      | 7.36        | 0.78        | (5.35)      | (4.91)      |
|    | Dividend  | 6.60        | 6.00        | 3.98        | 1.52        | 1.90        | —           | 2.28        | —           | —           | —           |
|    | Stockholders' equity  | 104.16      | 101.80      | 89.03       | 79.94       | 78.67       | 72.81       | 74.70       | 71.66       | 74.67       | 84.43       |
|    | Number of employees at December 31                              | 65,000      | 66,100      | 66,300      | 73,700      | 77,800      | 83,100      | 83,000      | 83,200      | 84,400      | 91,100      |
|    | Salaries, wages, and social charges                             | 4,641       | 4,292       | 4,303       | 4,229       | 4,182       | 3,789       | 3,572       | 3,395       | 3,277       | 3,277       |
|    | Salaries, wages, and social charges, as percentage of net sales | 25.8        | 26.0        | 28.5        | 29.9        | 28.9        | 30.4        | 29.7        | 31.8        | 31.4        | 30.5        |
|    | <i>Ratios</i>   |             |             |             |             |             |             |             |             |             |             |
|    | Operating income, as percentage of net sales                    | 8.1         | 8.1         | 5.6         | 3.5         | 3.9         | 3.3         | 5.7         | 3.9         | 2.3         | 2.8         |
|    | Operating income, as percentage of invested capital             | 20.9        | 19.3        | 12.4        | 7.2         | 8.6         | 6.7         | 11.6        | 7.1         | 3.9         | 4.5         |
|    | Net income, as percentage of stockholders' equity               | 20.7        | 21.5        | 15.7        | 6.7         | 10.1        | (3.0)       | 10.1        | 1.1         | (6.7)       | (5.5)       |
|    | <b>Figures on a Current-Value Basis</b>                         | <b>1985</b> | <b>1984</b> | <b>1983</b> | <b>1982</b> | <b>1981</b> | <b>1980</b> | <b>1979</b> | <b>1978</b> | <b>1977</b> | <b>1976</b> |
|    | <i>Per common share of Hfl 20, in guilders</i>                  |             |             |             |             |             |             |             |             |             |             |
|    | Net income  | 18.49       | 16.36       | 9.26        | 2.20        | 2.74        | (5.98)      | 3.01        | (1.89)      | (8.11)      | (9.19)      |
|    | Stockholders' equity  | 123.41      | 123.50      | 113.40      | 110.74      | 110.51      | 100.84      | 96.99       | 96.11       | 98.24       | 109.49      |

\* Of which Hfl 30 million in cash.

| Product Group Statistics    | 1985          | 1984          | 1983          | 1982          | 1981          | 1980          | 1979          | 1978          | 1977          | 1976          | 65 |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----|
| <i>Millions of guilders</i> |               |               |               |               |               |               |               |               |               |               |    |
| <i>Net sales</i>            |               |               |               |               |               |               |               |               |               |               |    |
| Man-made fibers             |               |               |               |               |               |               |               |               |               |               |    |
| Textile uses                | 3,577         | 3,528         | 3,223         | 3,105         | 3,427         | 2,663         | 2,817         | 2,633         | 2,590         | 2,834         |    |
| Industrial uses             | 1,649         | 1,507         | 1,303         | 1,254         | 1,251         | 1,119         | 1,035         | 934           | 1,008         | 970           |    |
|                             | <u>5,226</u>  | <u>5,035</u>  | <u>4,526</u>  | <u>4,359</u>  | <u>4,678</u>  | <u>3,782</u>  | <u>3,852</u>  | <u>3,567</u>  | <u>3,598</u>  | <u>3,804</u>  |    |
| Chemical products           |               |               |               |               |               |               |               |               |               |               |    |
| Salt and heavy chemicals    | 2,482         | 2,302         | 2,001         | 1,872         | 1,924         | 1,729         | 1,797         | 1,388         | 1,370         | 1,312         |    |
| Specialty chemicals         | 2,673         | 2,498         | 2,096         | 1,945         | 2,087         | 1,820         | 1,684         | 1,528         | 1,628         | 1,471         |    |
|                             | <u>5,155</u>  | <u>4,800</u>  | <u>4,097</u>  | <u>3,817</u>  | <u>4,011</u>  | <u>3,549</u>  | <u>3,481</u>  | <u>2,916</u>  | <u>2,998</u>  | <u>2,783</u>  |    |
| Coatings                    | 2,171         | 1,973         | 1,796         | 1,572         | 1,513         | 1,432         | 1,221         | 1,049         | 975           | 941           |    |
| Pharmaceuticals             | 2,138         | 1,849         | 1,647         | 1,563         | 1,484         | 1,320         | 1,274         | 1,211         | 1,099         | 1,071         |    |
| Consumer products           | 1,677         | 1,302         | 1,080         | 1,055         | 1,013         | 869           | 725           | 696           | 611           | 789           |    |
| Miscellaneous products      | 1,903         | 1,826         | 2,142         | 1,976         | 1,959         | 1,670         | 1,595         | 1,349         | 1,274         | 1,362         |    |
|                             | <u>7,889</u>  | <u>6,950</u>  | <u>6,665</u>  | <u>6,166</u>  | <u>5,969</u>  | <u>5,291</u>  | <u>4,815</u>  | <u>4,305</u>  | <u>3,959</u>  | <u>4,163</u>  |    |
| Total                       | 18,270        | 16,785        | 15,288        | 14,342        | 14,658        | 12,622        | 12,148        | 10,788        | 10,555        |               |    |
| Intra-Group deliveries      | (260)         | (265)         | (203)         | (188)         | (182)         | (169)         | (133)         | (122)         | (122)         |               |    |
| Net sales                   | <u>18,010</u> | <u>16,520</u> | <u>15,085</u> | <u>14,154</u> | <u>14,476</u> | <u>12,453</u> | <u>12,015</u> | <u>10,666</u> | <u>10,433</u> | <u>10,750</u> |    |
| <i>Operating income</i>     |               |               |               |               |               |               |               |               |               |               |    |
| Man-made fibers             | 291           | 302           | 151           | (19)          | 33            | (170)         | 74            | 10            | (88)          |               |    |
| Chemical products           | 474           | 403           | 193           | 89            | 125           | 183           | 253           | 122           | 110           |               |    |
| Coatings                    | 130           | 144           | 143           | 97            | 110           | 110           | 98            | 64            | 45            |               |    |
| Pharmaceuticals             | 355           | 306           | 260           | 233           | 190           | 145           | 134           | 140           | 133           |               |    |
| Consumer products           | 87            | 69            | 59            | 47            | 50            | 40            | 31            | 31            | 16            |               |    |
| Miscellaneous products      | 191           | 168           | 65            | 51            | 88            | 116           | 132           | 107           | 80            |               |    |
| Total                       | <u>1,528</u>  | <u>1,392</u>  | <u>871</u>    | <u>498</u>    | <u>596</u>    | <u>424</u>    | <u>722</u>    | <u>474</u>    | <u>296</u>    |               |    |
| Not allocated               | (63)          | (52)          | (28)          | (5)           | (32)          | (8)           | (33)          | (53)          | (56)          |               |    |
| Operating income            | <u>1,465</u>  | <u>1,340</u>  | <u>843</u>    | <u>493</u>    | <u>564</u>    | <u>416</u>    | <u>689</u>    | <u>421</u>    | <u>240</u>    | <u>305</u>    |    |
| <i>Invested capital</i>     |               |               |               |               |               |               |               |               |               |               |    |
| Man-made fibers             | 1,662         | 2,446         | 2,364         | 2,477         | 2,328         | 2,123         |               |               |               |               |    |
| Chemical products           | 2,393         | 2,362         | 2,025         | 1,895         | 1,851         | 1,749         |               |               |               |               |    |
| Coatings                    | 894           | 738           | 653           | 598           | 569           | 585           |               |               |               |               |    |
| Pharmaceuticals             | 987           | 809           | 772           | 701           | 714           | 733           |               |               |               |               |    |
| Consumer products           | 359           | 366           | 315           | 295           | 289           | 261           |               |               |               |               |    |
| Miscellaneous products      | 675           | 605           | 604           | 1,007         | 1,058         | 973           |               |               |               |               |    |
| Total                       | <u>6,970</u>  | <u>7,326</u>  | <u>6,733</u>  | <u>6,973</u>  | <u>6,809</u>  | <u>6,424</u>  |               |               |               |               |    |
| Not allocated               | (138)         | (123)         | (67)          | (92)          | (65)          | (6)           |               |               |               |               |    |
| Invested capital            | <u>6,832</u>  | <u>7,203</u>  | <u>6,666</u>  | <u>6,881</u>  | <u>6,744</u>  | <u>6,418</u>  | <u>6,074</u>  | <u>5,777</u>  | <u>6,014</u>  | <u>6,415</u>  |    |

## Regional Statistics

Millions of guilders

*The Netherlands*

|  |        |        |        |        |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Net sales by area of destination               | 1,988  | 1,836  | 1,675  | 1,561  | 1,460  | 1,454  | 1,419  | 1,289  | 1,284  | 1,295  |
| Net sales by area of origin                    | 6,234  | 5,772  | 5,106  | 4,528  | 4,699  | 4,255  | 4,212  | 3,623  | 3,585  | 3,706  |
| Operating income                               | 568    | 453    | 229    | 75     | 133    | 117    |        |        |        |        |
| Expenditures for property, plant and equipment | 424    | 286    | 283    | 338    | 303    | 246    | 170    | 180    |        |        |
| Invested capital                               | 2,560  | 2,414  | 2,293  | 2,288  | 2,143  | 2,095  | 2,069  | 1,983  | 1,962  | 2,286  |
| Number of employees                            | 23,100 | 22,400 | 22,000 | 22,600 | 23,000 | 23,600 | 23,700 | 24,300 | 25,400 | 27,600 |

*Federal Republic of Germany*

|  |        |        |        |        |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Net sales by area of destination               | 2,605  | 2,493  | 2,340  | 2,168  | 2,266  | 2,198  | 2,243  | 1,966  | 1,932  | 2,056  |
| Net sales by area of origin                    | 4,419  | 4,130  | 3,580  | 3,395  | 3,385  | 3,106  | 3,087  | 2,825  | 2,658  | 2,727  |
| Operating income                               | 384    | 370    | 178    | 128    | 105    | 66     |        |        |        |        |
| Expenditures for property, plant and equipment | 191    | 157    | 110    | 136    | 138    | 130    | 100    | 96     |        |        |
| Invested capital                               | 1,679  | 1,562  | 1,694  | 1,688  | 1,660  | 1,578  | 1,613  | 1,576  | 1,690  | 1,622  |
| Number of employees                            | 19,000 | 18,400 | 18,700 | 19,400 | 20,200 | 21,000 | 21,200 | 21,300 | 21,800 | 23,800 |

*Other EEC countries*

|  |       |       |       |       |       |       |       |        |        |        |
|--|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| Net sales by area of destination               | 4,618 | 3,991 | 3,449 | 3,398 | 3,431 | 2,966 | 2,791 | 2,348  | 2,143  | 2,198  |
| Net sales by area of origin                    | 2,021 | 1,662 | 1,491 | 1,561 | 1,633 | 1,498 | 1,287 | 1,161  | 1,055  | 1,003  |
| Operating income                               | 182   | 135   | 112   | 100   | 78    | 46    |       |        |        |        |
| Expenditures for property, plant and equipment | 82    | 67    | 53    | 37    | 43    | 63    | 44    | 36     |        |        |
| Invested capital                               | 907   | 744   | 650   | 645   | 601   | 632   | 583   | 541    | 521    | 393    |
| Number of employees                            | 7,900 | 6,700 | 6,800 | 7,200 | 8,200 | 9,600 | 9,600 | 10,200 | 10,000 | 11,000 |

*Rest of Europe*

|  |       |       |       |       |       |       |       |       |       |       |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Net sales by area of destination               | 2,121 | 1,911 | 1,682 | 1,739 | 1,845 | 1,750 | 1,732 | 1,384 | 1,473 | 1,646 |
| Net sales by area of origin                    | 1,042 | 808   | 735   | 831   | 825   | 718   | 711   | 573   | 561   | 712   |
| Operating income (loss)                        | 117   | 80    | 62    | 64    | 31    | 37    | 56    | 40    | (2)   | 16    |
| Expenditures for property, plant and equipment | 42    | 33    | 24    | 31    | 52    | 36    | 16    | 11    | 11    | 36    |
| Invested capital                               | 339   | 308   | 242   | 264   | 332   | 309   | 329   | 254   | 303   | 433   |
| Number of employees                            | 4,600 | 4,400 | 4,200 | 5,500 | 5,800 | 6,400 | 6,300 | 6,000 | 6,300 | 7,600 |

*North America*

|  |       |       |       |        |        |        |        |        |        |        |
|--|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| Net sales by area of destination               | 3,923 | 3,781 | 3,744 | 3,241  | 3,375  | 2,362  | 2,413  | 2,315  | 2,334  | 2,292  |
| Net sales by area of origin                    | 3,510 | 3,353 | 3,462 | 3,048  | 3,210  | 2,253  | 2,224  | 2,027  | 2,133  | 2,147  |
| Operating income (loss)                        | 95    | 166   | 123   | (24)   | 99     | 45     | 113    | 99     | 87     | 53     |
| Expenditures for property, plant and equipment | 231   | 217   | 136   | 148    | 139    | 150    | 117    | 93     | 87     | 103    |
| Invested capital                               | 1,047 | 1,853 | 1,510 | 1,695  | 1,721  | 1,542  | 1,291  | 1,188  | 1,339  | 1,459  |
| Number of employees                            | 5,400 | 8,800 | 9,100 | 13,400 | 14,900 | 16,000 | 16,200 | 15,600 | 15,300 | 15,500 |

*Other regions*

|  |       |       |       |       |       |       |       |       |       |       |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Net sales by area of destination               | 2,755 | 2,508 | 2,195 | 2,047 | 2,099 | 1,723 | 1,417 | 1,364 | 1,267 | 1,263 |
| Net sales by area of origin                    | 784   | 795   | 711   | 791   | 724   | 623   | 494   | 457   | 441   | 455   |
| Operating income                               | 119   | 136   | 139   | 150   | 118   | 105   | 79    | 86    | 72    | 90    |
| Expenditures for property, plant and equipment | 38    | 24    | 19    | 40    | 18    | 20    | 14    | 18    | 20    | 15    |
| Invested capital                               | 300   | 322   | 277   | 301   | 287   | 262   | 189   | 235   | 199   | 222   |
| Number of employees                            | 5,000 | 5,400 | 5,500 | 5,600 | 5,700 | 6,500 | 6,000 | 5,800 | 5,600 | 5,600 |

# Principal Companies of the Akzo Group

December 31, 1985

Percentages of participation are only stated for companies in which Akzo N.V. or any of its majority-owned subsidiaries separately or jointly holds less than 95% of the subscribed stock.

| Company Name   | Country                                | Participation (%) | Product Category | Country  | Participation (%)  |
|--|--|-------------------|------------------|--|--------------------|
| <b>Enka, Wuppertal</b>   | <b>Federal Republic of Germany (D)</b> |                   |                  | Netherlands  | (50)               |
|  |  |                   |                  | Netherlands  | (33)               |
|  |  |                   |                  | D  |                    |
|  |  |                   |                  | D  | (67)               |
|  |  |                   |                  | D  | (67)               |
| <i>Man-made fibers, machinery, engineering plastics, membranes, nonwovens, various industrial products</i> |  |                   |                  | Belgium  |                    |
|  |  |                   |                  | Denmark  |                    |
| Enka B.V., Arnhem  | Netherlands                            |                   |                  | France   |                    |
| Enka International B.V., Arnhem  | Netherlands                            |                   |                  | Norway   |                    |
| Akzo Plastics B.V., Arnhem   | Netherlands                            |                   |                  | Italy  |                    |
| Colbond B.V., Arnhem   | Netherlands                            |                   |                  | Spain  |                    |
| Aramide Maatschappij v.o.f., Emmen   | Netherlands                            | (50)              |                  | U.K.   |                    |
| Enka AG, Wuppertal   | D                                      |                   |                  | U.S.A.   |                    |
| Barmag Barmer Maschinenfabrik AG, Remscheid-Lennep   | D                                      |                   |                  | Argentina  | (82)               |
| with establishments in Switzerland*, U.S.A., Brazil*, and Hong Kong  |  |                   |                  | Brazil   |                    |
| Kuaggarn Textil GmbH, Wuppertal  | D                                      |                   |                  | Brazil   | (40)               |
| La Seda de Barcelona S.A., Barcelona   | Spain                                  | (58)              |                  | Singapore  |                    |
| Enka America Inc., Enka, North Carolina  | U.S.A.                                 |                   |                  | Japan  | (50)               |
| Fibras Químicas S.A., Monterrey  | Mexico                                 | (40)              |                  | Japan  | (50)               |
| Polyenka S.A., São Paulo   | Brazil                                 | (51)              |                  | Japan  | (50)               |
| COBAFI Companhia Bahiana de Fibras S.A., Camaçari  | Brazil                                 | (36)              |                  |  |                    |
| Enka de Colombia S.A., Medellín  | Colombia                               | (49)              |                  | <b>Akzo Coatings, Hoofddorp</b>  | <b>Netherlands</b> |
| Enkador S.A., Quito  | Ecuador                                | (49)              |                  |  |                    |
| Century Enka Ltd, Calcutta   | India                                  | (40)              |                  | <i>Paints, stains, synthetic resins</i>                                |                    |
|  |  |                   |                  |  |                    |
| <b>Akzo Zout Chemie, Hengelo (O)</b>   | <b>Netherlands</b>                     |                   |                  | Sikkens B.V., Sassenheim   | Netherlands        |
|  |  |                   |                  | Koninklijke Talens B.V., Apeldoorn                                     | Netherlands        |
| <i>Salt, chlorine, alkali products, vinyl chloride monomer, methanol, petrochemicals</i>                   |  |                   |                  | Synthese B.V., Bergen op Zoom  | Netherlands        |
|  |  |                   |                  | Akzo Farben Beteiligungs-GmbH, Stuttgart                               | D                  |
|  |  |                   |                  | Akzo Coatings GmbH, Stuttgart  | D                  |
|  |  |                   |                  | Akzo Coatings Ges.mBH, Salzburg  | Austria            |
|  |  |                   |                  | Akzo Coatings, division of Akzo België N.V., Ternat                    | Belgium            |
| Akzo Zout Chemie Nederland B.V., Hengelo   | Netherlands                            |                   |                  | S.A. Levis N.V., Vilvoorde   | Belgium            |
| Methanol Chemie Nederland v.o.f., Delfzijl   | Netherlands                            | (50)              |                  | Akzo Coatings S.A., Paris  | France             |
| Methanol v.o.f., Delfzijl  | Netherlands                            | (30)              |                  | with establishments in Morocco*, Senegal*, Ivory Coast*, and Cameroun* |                    |
| Delamine B.V., Delfzijl  | Netherlands                            | (50)              |                  | Dacral S.A., Paris   | France             |
| Delesto B.V., Delfzijl   | Netherlands                            | (50)              |                  | Blundell-Permoglaze Holdings PLC, London                               | U.K.               |
| ROVIN Rotterdamse Vinylunie v.o.f., Amsterdam  | Netherlands                            | (50)              |                  | Sikkens U.K. Ltd, London   | U.K.               |
| Norddeutsche Salinen GmbH, Stade   | D                                      |                   |                  | Akzo Coatings Italia S.p.A., Milan                                     | Italy              |
| Elektro-Chemie Ibbenb. GmbH, Ibbenbüren  | D                                      | (50)              |                  | Akzo Coatings S.A., Barcelona  | Spain              |
| Konezo, division of Akzo België N.V., Brussels   | Belgium                                |                   |                  | Akzo Coatings America Inc.**   |                    |
| Dansk Salt I/S, PR Mariager  | Denmark                                | (50)              |                  | Troy, Michigan   | U.S.A.             |
| Akzo Zout Chemie Svenska A.B., Göteborg  | Sweden                                 |                   |                  | with establishment in Canada   |                    |
| Denak Co. Ltd, Tokyo   | Japan                                  | (50)              |                  | Miluz S.A.I.C.I. y F., Buenos Aires                                    | Argentina          |
|  |  |                   |                  | Akzo Indústria e Comércio Ltda.  |                    |
| <b>Akzo Chemie, Amersfoort</b>   | <b>Netherlands</b>                     |                   |                  | Tintas Wanda, São Paulo  | Brazil             |
|  |  |                   |                  | Metropolitan Paint Factory Ltd, Bangkok                                | Thailand           |
| <i>Specialty chemicals, functional chemicals, catalysts, industrial chemicals</i>                          |  |                   |                  |  |                    |
|  |  |                   |                  |  |                    |
| Akzo Chemie Nederland B.V., Amersfoort   | Netherlands                            |                   |                  |  |                    |
| Cyanamid-Ketjen Katalysator B.V., Amsterdam  | Netherlands                            | (50)              |                  |  |                    |

\* Participation less than 95%.

\*\* Also listed under Akzo America Inc.

| Akzo Pharma, Oss  | Netherlands        | Akzo America Inc., Enka, North Carolina   | U.S.A.           |
|---|--------------------|---|------------------|
| <i>Ethical drugs</i><br>(Organon International B.V., Oss, the Netherlands)  |                    | <i>Salt, specialty chemicals, coatings, pharmaceuticals and diagnostics, various industrial products</i>  |                  |
| <i>Hospital supplies</i><br>(Organon Teknika N.V., Turnhout, Belgium)   |                    | International Salt Co.***, Clarks Summit, Pennsylvania  | U.S.A.           |
| <i>Nonprescription products</i><br>(Chefaro International B.V., Rotterdam, the Netherlands)   |                    | with establishments in Canada and the Netherlands Antilles  |                  |
| <i>Raw materials for the pharmaceutical industry</i><br>(Diosynth B.V., Oss, the Netherlands)   |                    | Akzo Chemie America, Chicago, Illinois  | U.S.A.           |
| <i>Veterinary products</i><br>(Intervet International B.V., Boxmeer, the Netherlands)   |                    | with establishments in Canada   |                  |
|   |                    | Akzo Coatings America Inc., Troy, Michigan  | U.S.A.           |
|   |                    | with establishment in Canada  |                  |
| Sales offices or production plants of one or more of the above companies are established in:  |                    | Pharmaceutical companies in the United States and Canada active in the fields of ethical drugs and diagnostics (Organon Inc.), hospital supplies (Organon Teknika Corp., Bionetics Research Inc.), raw materials for the pharmaceutical industry (Diosynth Inc.), and veterinary products (Intervet America Inc.) |                  |
| – the Netherlands, Federal Republic of Germany, Belgium, France, Italy, United Kingdom, Republic of Ireland, Denmark, Norway, Sweden, Finland, Switzerland, Spain, Portugal, Greece, Turkey |                    | Armira Corp., Bolivar, Tennessee  | U.S.A.           |
| – United States**, Canada**   |                    |   |                  |
| – Mexico, Argentina, Brazil, Chile, Ecuador, Venezuela  |                    |   |                  |
| – Cyprus, Bangladesh*, India*, Malaysia, Pakistan*, Thailand, Republic of Korea*, Indonesia*, Hong Kong, Japan*, Taiwan*  |                    |   |                  |
| – Australia   |                    |   |                  |
| – Morocco, Nigeria*, South Africa   |                    |   |                  |
| <b>Akzo Consumenten Produkten, The Hague</b>  | <b>Netherlands</b> | <b>Other companies</b>  |                  |
|   | (51)               | N.V. Verenigde Instrumentenfabrieken  |                  |
| <i>Detergents and cleaning products, health and bodycare products, foodstuffs</i>   |                    | Enraf-Nonius, Delft (medical equipment, etc.)   | Netherlands (13) |
|   |                    | Akzo Engineering B.V., Arnhem   | Netherlands      |
|   |                    | Akzo Systems B.V., Velp   | Netherlands      |
|   |                    | Rijnconsult B.V., Arnhem  | Netherlands      |
|   |                    | Rotterdamse Margarine Industrie   |                  |
|   |                    | ROMI B.V., Vlaardingen  | Netherlands      |
| Kortman Redipro B.V., Veenendaal  | Netherlands        |   |                  |
| Duyvis Recter B.V., Veenendaal  | Netherlands        |   |                  |
| Grada Produktiebedrijven B.V., Apeldoorn  | Netherlands        |   |                  |
| California Verkoopmaatschappij B.V., Harderwijk   | Netherlands        |   |                  |
| Otarès B.V., Enschede   | Netherlands        |   |                  |
| N.V. Akzo Consumer Products (Belgium) S.A., Brussels  | Belgium            |   |                  |
| Ashe Laboratories Ltd, Leatherhead  | U.K.               |   |                  |
| Mayolande S.A., Seclin  | France             |   | (89)             |
| A/S Blumøller, Odense   | Denmark            |   |                  |
| De Danske Eddikebryggerier C. Lange A/S (Heidelberg Food), Frederiksberg  | Denmark            |   |                  |
| Tomten A/S, Sandvika  | Norway             |   |                  |
| Legrain S.A., Barcelona   | Spain              |   |                  |
| Temana sales offices or production plants are established in:   |                    |   |                  |
| – the United Kingdom, France, Greece, Portugal, Austria, Switzerland, Sweden, Norway, and Finland   |                    |   |                  |

\* Participation less than 95%.

\*\* Also listed under Akzo America Inc.

\*\*\* Placed under operational control of Akzo Zout Chemie, Hengelo, with effect from January 1, 1986.

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*Dividends are paid through the following banks:*

**The Netherlands**

Amsterdam-Rotterdam Bank  
Algemene Bank Nederland  
Bank Mees & Hope  
Nederlandsche Middenstandsbank  
Pierson, Heldring & Pierson  
Rabobank Nederland  
at their offices in Amsterdam, Rotterdam, The Hague, Utrecht  
(Rabobank Nederland), and Arnhem, if established there

**Federal Republic of Germany**

Deutsche Bank  
Deutsche Bank Berlin  
Bank für Handel und Industrie  
Berliner Handels- und Frankfurter Bank  
Dresdner Bank  
Sal. Oppenheim jr. & Cie.  
at their offices in Düsseldorf, Frankfurt/Main, Hamburg, Cologne,  
Berlin (West), and Wuppertal, if established there

**Belgium**

Generale Bankmaatschappij  
Paribas Bank België  
Kredietbank  
at their offices in Brussels and Antwerp

**Luxembourg**

Banque Générale du Luxembourg, Luxembourg

*Akzo N.V. common stock is listed on the following stock exchanges:*

|                              |  |
|------------------------------|--|
| The Netherlands:             | Amsterdam  |
| Federal Republic of Germany: | Frankfurt/Main, Düsseldorf, and<br>Berlin (West) |
| Switzerland:                 | Zurich, Basel, and Geneva                        |
| France:                      | Paris  |
| Belgium:                     | Brussels and Antwerp                             |
| United Kingdom:              | London   |
| Austria:                     | Vienna   |

**United Kingdom**

Barclays Bank  
Midland Bank  
at their offices in London

**France**

Lazard Frères & Cie  
Banque Nationale de Paris  
at their offices in Paris

**Austria**

Creditanstalt-Bankverein, Vienna

**Switzerland**

Schweizerische Kreditanstalt, Zurich  
Schweizerische Bankgesellschaft, Zurich  
Schweizerischer Bankverein, Basel  
and the Swiss branch offices of these banks  
Pictet & Cie, Geneva

**United States**

Morgan Guaranty Trust Company, New York

