

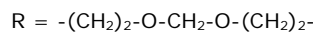
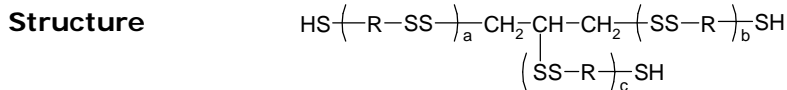


## Product Data Sheet

Status:  
January 2009

# Thioplast™ G 44

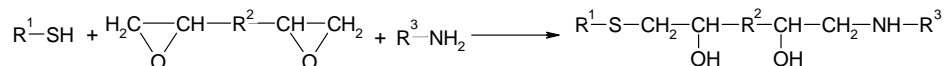
**Description** Liquid polysulfide polymer with thiol end groups



$$a + b + c = n < 7$$

Properties		
Appearance		brown liquid
SH content	%	5.0 – 7.0
Viscosity (25 °C)	Pa*s	max 1.3
Av. Molecular weight	g/mol	< 1100
Cross-linking agent	mol-% TCP	0.5
Specific weight	kg/m <sup>3</sup>	1,257
Water content	%	max 0.3
Sulfur content	%	37 - 38
Volatile ingredients	%	max 1.0
Glass point	°C	app. – 60 °C
Flash point	°C	> 230 °C
Specific heat	kJ/kg*K	1.26
Heat of combustion	kJ/kg	24,075

**Application** Epoxy modification in coating systems  
The reactive terminal groups of epoxy resins react with the SH-end groups of Thioplast G 44 so that copolymers are formed. A curative, e.g. an amine, is required which, together with Thioplast G 44, forms one component of the system. The general curing reaction is indicated in the formula below:



The cured products are characterised by increased toughness, superior impact strength and a significantly lower level of brittleness.

The ratio Thioplast G 44 : epoxy resin can be varied. The most effective ratios are between 1 : 1.2 and 1 : 2.5

**Packaging** lid drums 250 kg net; inner liner, bungs upon request

**Storage** Store the container in cool and dry area, keep it closed when not in use.  
Shelf life under appropriate storage conditions min 3 years

**Handling** Full information on the safe handling of Thioplast G 44 is available in the Material Safety Data Sheet (MSDS).

### Legal disclaimer:

All information, recommendations and suggestions appearing in this data sheet concerning the use of the products are based upon tests and data believed to be reliable; however, it is the user's responsibility to determine the suitability for his own use of the products described here. Since the actual use by others is beyond the control of Akzo Nobel Functional Chemicals GmbH & Co. KG no guarantee expressed or implied is made by Akzo Nobel Functional Chemicals GmbH & Co. KG as to the effect of such use or the results to be obtained, nor does Akzo Nobel Functional Chemicals GmbH & Co. KG assume any liability arising out of the use by others of the products referred to herein. Nor is the information herein to be construed as absolutely complying with existing applicable laws or government regulations. Nothing herein contained is to be construed as permission or as a recommendation to infringe any patent. All orders accepted shall be subjected to the standard conditions of sale of the manufacturing company, Akzo Nobel Functional Chemicals GmbH & Co.

Akzo Nobel Functional  
Chemicals GmbH & Co. KG  
Liebigstraße 7  
D-07973 Greiz  
Tel. +49-3661-78-0  
[thioplast@akzonobel-chemicals.com](mailto:thioplast@akzonobel-chemicals.com)  
[www.thioplast.com](http://www.thioplast.com)