



TMIn SSG

Product description

Trimethylindium, select semiconductor grade

Molecular formula	: (CH ₃) ₃ In
Molecular weight	: 159.9
CAS No.	: 3385-78-2
EINECS/ELINCS No.	: 222-200-9
TSCA status	: listed on inventory

TMIn SSG is used as a high quality solid In precursor for the deposition of compound semiconductors which are used in applications such as light emitting diodes, laser diodes, high performance transistors and highly efficient solar cells. TMIn SSG is available in advanced packaging like the Hiperloop/Hiperquad container series.

Specifications

For detailed specification please contact your AkzoNobel representative.

Characteristics

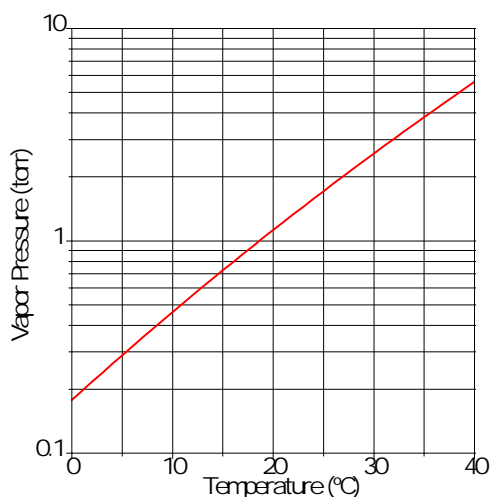
Appearance	: white crystalline solid
Density, 30°C	: 1.568 g/ml
Melting point	: 88°C
Boiling point	: 134°C
Stability to air	: ignites upon exposure
Stability to water	: reacts violently, may ignite upon contact
Solubility	: soluble in aromatic and saturated aliphatic and cycloaliphatic hydrocarbons

Vapor pressure

at 10°C (283.15 K)	: 0.46 kPa
at 30°C (303.15 K)	: 2.58 kPa

Gas constants: $\log P(\text{torr}) = B - A/T(K)$

A	: 3204
B	: 10.98



Storage

TMIn SSG is stable when stored under a dry, inert atmosphere and away from heat. CAUTION: TMIn SSG may undergo exothermic decomposition with gas evolution at elevated temperatures (see section on Safety and handling).

Packaging and transport

Containers are fabricated from stainless steel with an electropolished internal finish and are equipped with dip tube for top discharge and diaphragm valves. The diaphragm valves are equipped with metal gasket face seal connections such as Swagelok® VCR®.

For more information please refer to our Cylinder Offerings leaflet, available at www.akzonobel.com/hpmpo.

Both packaging and transport meet the international regulations.

TMIn SSG is classified as Organometallic substance, solid, pyrophoric, water-reactive; Class 4.2; UN 3393; PG I.

Safety and handling

TMIn SSG ignites upon exposure to air and reacts violently with water. Water must be scrupulously removed from process equipment prior to putting it into metal alkyls service. Failure to do so may result in an explosion. At elevated temperatures, TMIn SSG will undergo exothermic decomposition with evolution of extremely flammable gas. Products of complete combustion of TMIn SSG are indium oxide, carbon dioxide and water. TMIn SSG causes severe burns to the skin and eyes. It is imperative that proper personal protective equipment be worn when handling TMIn SSG.

Please refer to the Material Safety Data Sheet (MSDS) for further information on the safe storage, use and handling of TMIn SSG. This information should be thoroughly reviewed prior to acceptance of this product. The MSDS is available at www.akzonobel.com/hpmpo.

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AkzoNobel Functional Chemicals
Amersfoort, The Netherlands
Tel. +31 33 467 6767
Fax +31 33 467 6151

metalorganicsEU@akzonobel.com

AkzoNobel Functional Chemicals
Chicago, U.S.A.
Tel. +1 312 544 7000
+1 800 828 7929 (Toll free US only)
Fax +1 312 544 7188
metalorganicsNA@akzonobel.com

www.akzonobel.com/hpmpo

AkzoNobel Functional Chemicals
Shanghai, PR China
Tel. +86 21 6279 3399
Fax +86 21 6247 1129

metalorganicsAP@akzonobel.com