DMZn SSG

Dimethylzinc

DMZn SSG is a zinc precursor (Select Semiconductor Grade) for the deposition of compound semiconductors.

CAS number 544-97-8	EINECS/ELINCS No. 208-884-1
TSCA status listed on inventory	Molecular weight 95.5

Characteristics

Appearance	Clear, colorless liquid
Boiling point	44 °C
Density, 28 °C	1.313 g/cm^3
Melting point	-29 °C
Solubility	Soluble in aromatic and saturated aliphatic and cycloaliphatic hydrocarbons
Stability to air	Ignites upon exposure
Stability to water	Reacts violently, may ignite upon contact
Viscosity, 30 °C	0.3 mPa.s

Vapor Pressure

at 10 °C / 283.15 K	195.2 torr
at 20 °C / 293.15 K	30.9 torr
A	1560
B	7.8
Gas constants	log P(torr) = B-A/T(K)

Applications

DMZn SSG is used as a high quality zinc precursor for the deposition of compound semiconductors which are used in applications such as light emitting diodes, laser diodes and high efficiency solar cells. 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.

Storage

DMZn SSG is stable when stored under a dry, inert atmosphere and away from heat. CAUTION: DMZn SSG may undergo violent exothermic decomposition with flammable gas evolution if stored at temperatures above 285°C (545°F) (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 hmpo.nouryon. com. Both packaging and transport meet the international regulations. DMZn SSG is classified as Organometallic substance, liquid, pyrophoric, water-reactive; Class 4. 2; UN 3394; PG I.

Safety and handling

DMZn 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. Products of complete combustion of DMZn SSG are zinc oxide, carbon oxide and water. DMZn SSG causes severe burns to the skin and eyes. It is imperative that proper personal protective equipment be worn when handling DMZn SSG. Please refer to the Material Safety Data Sheet (MSDS) for further information on the safe storage, use and handling of DMZn SSG. This information should be thoroughly reviewed prior to acceptance of this product. The MSDS is available at https://hpmo.nouryon.com.

Additional information

Nouryon uses leading edge processes, purification and transfilling techniques that ensure the repeatable and consistent delivery of our DMZn SSG in each cylinder that we supply. We apply state of the art techniques such as ICP-OES for trace metal analysis to meet your demands. Please contact us for detailed sales specifications.

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Nouryon, however, makes no warranty as to accuracy and/or sufficiency of such information and/or suggestions, as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. Nouryon does not accept any liability whatsoever arising out of the use of or reliance on this information, or out of the use or the performance of the product. Nothing contained herein shall be construed as granting or extending any license under any patent. Customer must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes. The information contained herein supersedes all previously issued information on the subject matter covered. The customer may forward, distribute, and/or photocopy this document only if unaltered and complete, including all of its headers and footers, and should refrain from any unauthorized use. Don't copy this document to a website.

Swagelok and VCR are registered trademarks of Swagelok Company.

Contact Us

Polymer Catalysts Americas
polymer.amer@nouryon.com

Polymer Catalysts Europe, Middle East, India and Africa
polymer.emeia@nouryon.com

Polymer Catalysts Asia Pacific
polymer.apac@nouryon.com

Nouryon

© 2021