

WONIK MATERIALS NORTH AMERICA

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SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY INFORMATION

Bis(triethylsilyl)selenide PRODUCT NAME:

CAS NO: 14846-53-8

CHEMICAL USE: Research and Development

SYNONYMS: Hexaethyldisilaselenane

MANUFACTURER:

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IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC 1-703-741-5500

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SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION

Acute toxicity, Oral (Category 3) Acute toxicity, Inhalation (Category 3) Acute toxicity, Dermal (Category 3)

Flammable Liquid, (Category 3)

Pictogram

Danger Signal Word

SECTION 2 HAZARDS IDENTIFICATION (Cont.)

Hazard Statements

H226	Flammable liquid and vapour
H301 + H331 +	Toxic if swallowed, in contact with skin or if inhaled
H331	
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled

Precautionary Phrases

P210	Keep away from heat/sparks/open flames/hot surfaces. –No smoking.
P222	Do not allow contact with air
P232	Protect from moisture
P233	Keep container tightly closed
P235	Keep cool
P240	Ground and bond container and receiving equipment
P241	Use explosion-proof electrical, ventilating and lighting equipment
P242	Use non-sparking tools
P243	Take action to prevent static discharges
P261	Avoid breathing fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling
P270	Do not eat, drink, or smoke when using this product
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves/protective clothing/eye protection/face protection
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P370 +P378	In case of fire: Use CO2, foam or extinguishing powder for extinction.
P402	Store in a dry place
P403	Store in a well-ventilated place

OTHER HAZARDS

Additional precautionary phrases are located throughout the safety data sheet

HMIS CLASSIFICATION:

Health: 3 Flammability: 3 Reactivity: 1 Special: Water Reactive

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: C₁₂H₃₀Si₂Se Molecular Weight: 309.50 Si Se Si

CHEMICAL NAME

CAS#

Bis(triethylsilyl)selenide

14846-53-8

SECTION 4 FIRST AID MEASURES

EYE EXPOSURE: Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open Remove contacts if easily possible. Get immediate, professional care from qualified physician or emergency care facility.

SKIN EXPOSURE: Wash affected area with copious amounts of water for at least 15 minutes. Remove contaminated clothes and shoes if necessary. Seek medical assistance immediately.

INHALATION: Remove victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. If not breathing administer CPR. If having trouble breathing give oxygen if available. Seek immediate emergency medical assistance and call Poison Center.

INGESTION: Do not induce vomiting. Rinse out mouth with water provided person is conscious. Seek immediate medical assistance and call Poison Center.

SECTION 5 FIREFIGHTING MEASURES

EXTINGUISHING MEDIA:

Suitable In case of fire: Use CO2, foam or extinguishing powder

Unsuitable DO NOT USE WATER!

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:

Carbon Monoxide, Carbon Dioxide, Hydrogen Selenide, and Sulfur Oxides

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

In combustion, toxic fumes may form.

Vapors can form explosive mixtures.

Moisture reactive, Exposure to moisture releases Hydrogen Selenide

Contact with strong oxidizers may cause fire.

ADVICE FOR FIRE FIGHTERS

Wear self-contained breathing apparatus.

Wear protective clothing to prevent contact with skin and eyes.

Vapors can form explosive mixtures

If allowable withdrawal from area and allow to burn

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONNAL PRECAUTIONS

Eliminate all sources of ignition.

Evacuate the area immediately.

Do not attempt to take action without suitable protective clothing.

ENVIRONMENTAL PRECAUTIONS

Do not discharge into drains or rivers.

Contain the spillage.

METHODS AND MATERIALS

Use non-sparking tools for clean-up procedure.

Use dry lime, soda ash, or sand.

SECTION 7 HANDLING AND STORAGE

PERSONNAL PRECAUTIONS

SAFE HANDLING: WARNING! FLAMMABLE LIQUID TOXIC BY INHALATION

AIR SENSITIVE WATER AND MOISTURE REACTIVE!

Ensure there is sufficient ventilation of the area. Do not eat, drink or smoke when using this product. Ground container and receiving equipment. Wash hands thoroughly after handing. Wash contaminated clothing before reuse. Safety showers, Eye wash station readily available in working area.

PROTECTION AGAINST EXPLOSIONS AND FIRES: KEEP AWAY FROM INCOMPATIBLE MATERIALS! Take precautionary measures against static discharge. Use explosion-proof electrical/ventilating/lighting. Use only non-sparking tools.

CONDITIONS FOR SAFE STORAGE

MANAGING STORAGE RISKS: Package and store containers in a blanket of Nitrogen. Store in cool, well-ventilated area. Keep away from sources of ignition. Keep container tightly closed.

STORAGE CONTROLS: Store in a well-ventilated area. Keep away from incompatibles. Keep cool.

MAINTAINING INTEGRITY: Keep away from heat/sparks/open flames/hot surfaces. –No smoking. Keep container tightly closed. Handle and use in a controlled environment under inert atmosphere. To be handled and used by competent individuals only.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

EYE PROTECTION: Approved safety glasses w/side shields, or safety goggles and face shield

SKIN PROTECTION: Wear appropriate chemical resistant gloves, rubber, neoprene

VENTILATION: Chemical fume hood. Handle and use under inert atmosphere.

RESPIRATOR: If adequate ventilation if not available, a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29CFR 1910.34 or NIOSH/MSHA or European Standard EN 149 approved respirator.

ADDITIONAL PROTECTION: WARNING! FLAMMABLE LIQUID TOXIC BY INHALATION Water/Moisture reactive and Air Sensitive. Avoid contact with skin, eyes, clothing. shoes. Do not inhale vapors. Use with adequate ventilation. Use in a controlled environment. Avoid contact with WATER, MOISTURE, Oxidizing agents, friction, heat, flames and sparks. Use adequate protection to avoid contact with skin, clothing, and shoes. (Apron, lab coat, arm sleeves). Eyewash and safety shower in area capable of sustained flushing. Do not eat, drink or smoke in area.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: Colorless liquid

pH: No data available

MELTING POINT/ FREEZING POINT: No data available

BOILING POINT: 113-115 C at 4 torr (lit.)

FLASH POINT: No data available

AUTO-IGNITION TEMPERATURE: No data available LOWER EXPLOSION LIMIT: No data available UPPER EXPLOSION LIMIT: No data available VAPOR PRESSURE: No data available RELATIVE DENSITY: 1.063 g/mL (lit.) SOLUBILITY IN WATER: Insoluble, reacts PARTITION COEFFICIENT: No data available

VAPOR DENSITY: No data available

ODOR: Strong stench

ODOR THRESHOLD: No data available EVAPORATION RATE: No data available

SECTION 10 STABILITY AND REACTIVITY

STABILITY: STABLE IF STORED IN SEALED CORROSION RESISTANT CONTAINERS UNDER DRY INERT

ATMOSPHERE.

HAZARDOUS POLYMERIZATION: Has not been reported.

CONDITIONS TO AVOID: Moist, humid conditions, exposure to air, heat, friction, flames, sparks.

INCOMPATIBILITY: Water, moisture, strong oxidizing agents **DECOMPOSITION PRODUCTS**: Hexamethyldisiloxane, silicon oxide

SECTION 11 TOXICOLOGICAL DATA

ACUTE TOXICITY: No data available

SKIN CORROSION/IRRITATION: Irritant for skin and mucous membranes

SERIOUS EYE DAMAGE/IRRATATION: Irritant effect

RESPIRATORY OR SKIN SENSITIZATION: No sensitizing effect known

GERM CELL MUTAGENICITY: Not known

CARCINOGENICITY: Not known

REPRODUCTIVE TOXICITY: Not known

SPECIFIC TARGET ORGAN TOXICITY-SINGLE EXPOSURE: Not known SPECIFIC TARGET ORGAN TOXICITY-REPEATED EXPOSURE: Not known

ASPIRATION HAZARD: Not known

ADDITIONAL INFORMATION: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA, or ACGIH

SECTION 12 ECOLOGICAL DATA

TOXICITY: Not known

PERSISTANCE AND DEGRADABILITY: Not known

BIOACCUMULATIVE POTENTIAL: Not known

MOBILITY AND SOIL: Not known

PBT AND vPvB ASSESMENT: Not known

OTHER ADVERSE EFFECTS: Water hazard class 2 (self assessment); hazardous for water

ECOLOGICAL INFORMATION: May be hazardous to aquatic life. Do not allow product to reach ground water, water course or

sewage system. Do not allow product to be released to the environment without proper governmental permits

SECTION 13 DISPOSAL CONSIDERATIONS

DISPOSAL OF PACKAGING: Disposal must be made according to official regulations

SECTION 14 TRANSPORTATION DATA

Toxic liquid, flammable, organic, n.o.s. (Bis(triethylsilyl)selenide)

Class 6.1 Subclass 3

UN2929 PG II

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DOT, IATA, and IMDG Regulated

Marine Pollutant: YES





SECTION 15 REGULATORY INFORMATION

OSHA HAZARDS

None of the chemicals in this product are considered highly hazardous by OSHA

TSCA

No Data Available

CLEAN AIR ACT:

No Data Available

CLEAN WATER ACT:

No Data Available

SARA 302 COMPONENTS

None of the chemicals in this products have a TPQ

SARA 313 COMPONENTS

No Data Available

STATE

No Data Available

CALIFORNIA PROP 65

No Data Available

SECTION 16 OTHER INFORMATION

OTHER INFORMATION:

CAS: Chemical Abstract Service
DOT: Department of Transportation
EPA: Environmental Protection Agency

IARC: International Agency for the Research on Cancer

IATA: International Air Transport Association

IMDG: International Maritime Code for Dangerous Goods OSHA: Occupational Safety and Health Administration

SDS: Safety Data Sheet

TSCA: Toxic Substances Control Act

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, Wonik Materials North America makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

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SDS DEPT