

**GELEST, INC.**  
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**MATERIAL SAFETY  
 DATA SHEET**

**EMERGENCY TELEPHONE  
 CHEMTREC: 1-800-424-9300**

NAME USED ON LABEL: DIPHENYLDISELENIDE - OMSE028  
 CHEMICAL NAME: DIPHENYLDISELENIDE  
 SYNONYMS: HEXAMETHYLDISILSELANANE  
 CHEMICAL FAMILY: ORGANOSILANE  
 FORMULA: C<sub>12</sub>H<sub>10</sub>Se<sub>2</sub>  
 HMIS CODES HEALTH: 3 FLAMMABILITY: 2 REACTIVITY: 0

**INGREDIENTS**

IDENTITY	CAS NO.	%	TLV	OSHA PEL
DIPHENYLDISELENIDE	1666-136	>97	not established (OSHA PEL, TWA as Se: 0.2mg/m <sup>3</sup> )	not established

**PHYSICAL DATA**

Boiling Point: 160-5°C at 2mm	Melting Point: 59-61°C
Specific Gravity: 1.84	Vapor Pressure, 25°: ~2mm
Vapor Density (air = 1): >1	Solubility in water: insoluble, reacts
% volatiles: >97	Evaporation rate: not determined
Molecular Weight: 312.13	Other: NA
Appearance & Color: Yellow-orange solid with strong stench.	

**FIRE & EXPLOSION DATA**

Flash Point, COC: >65°C (>150°F)      Autoignition Temp.: not determined  
 Flammability Limits: not determined

Extinguishing Media: Carbon dioxide or dry powder.  
 Special Fire Fighting Procedures: Highly flammable. Material readily ignited with flame, sparks, friction or heat. Burning material may release toxic and corrosive fumes. Leave the area unless fitted with a self-contained breathing apparatus and fire protective clothing..  
 Unusual Fire and Explosion Hazards: Highly flammable material. Vapors can form explosive mixtures.

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## ENVIRONMENTAL INFORMATION

Spill response: Spillage of the material can create widespread odor problem. Leave the area unless fitted with a self-contained breathing apparatus. Small spills can be absorbed into vermiculite or other suitable absorbent. Odor can be attenuated by slurring material adsorbed onto vermiculite with 3-5% aqueous sodium hypochlorite (bleach). Sweep or transfer to a suitable container for disposal.

Recommended Disposal: Incinerate. Follow all chemical pollution control regulations.

## HEALTH HAZARD DATA

Eye Contact: No information available. Avoid Contact.

Skin contact: Avoid Contact.

Inhalation: Avoid inhalation.

Oral Toxicity: not determined

Note: The related compound DIPHENYLSELENIDE reported oral toxicity, rat: LD50: 360mg/kg

Inhalation Toxicity: not determined

TOXICITY-intravenous, mouse LD50: 28mg/kg  
RTECS: JM9152500

### SUGGESTED FIRST AID

**EYES:** In case of contact, immediately flush eyes with flowing water for at least 15 minutes. Get medical attention.

**SKIN:** Flush with water, then wash with soap and water.

**INHALATION:** Move exposed individual to fresh air. If coughing, shortness of breath or irritation persists seek medical attention.

**INGESTION:** Never give fluids or induce vomiting if patient is unconscious or having convulsions. To conscious individual give plenty of water to dilute ingested material. Get medical attention.

## REACTIVITY DATA

Stability: Stable in sealed containers stored.

Conditions to avoid: Material decomposes slowly in contact with moist air or with water liberating hydrogen selenide.

Conditions to avoid: Heat and ignition source.

Hazardous decomposition products: Hydrogen selenide, carbon monoxide, carbon dioxide, silicon dioxide and organic fumes.

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## SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical with caustic scrubber is recommended.  
Respiratory Protection: If exposure exceeds TLV, NIOSH approved organic vapor respirator.  
Eye and Face Protection: Chemical worker's goggles. Do not wear contact lenses.  
Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. An eyewash and emergency shower should be available. Launder clothing before reuse.

## OTHER PRECAUTIONS

For research and industrial use only.

Storage and Handling: Store in sealed containers.

Containers require grounding during use.

## TRANSPORTATION

DOT SHIPPING NAME: SELENIUM COMPOUND, SOLID, N.O.S., (DIPHENYLDISELENIDE)  
DOT HAZARD CLASS: 6.1  
DOT LABEL: Toxic  
DOT ID No: UN3283 PG: II

Prepared by safety and environmental affairs MSDS ISSUE DATE: OMSE028: 3/12/13  
SUPERSEDES: none

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