



## MATERIAL SAFETY DATA SHEET

### DIMETHYLDISELENIDE

#### SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name:  
Dimethyldiselenide, 99+%

Catalog Numbers:  
AC123900000, AC123900010, Ac123900050

Synonyms:  
Un Listed

Company Information:  
LEONID CHEMICALS  
62/A-2 1st Stage, Yeshwanthpur Industrial Suburb  
Ashokpuram School Road  
Bangalore-560 022, Karnataka, INDIA  
Ph: +91-80-2337 8354, Fax: +91-80-2357 4827

#### SECTION 2- COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	:	7101-31-7
Chemical Name	:	DIMETHYLDISELENIDE
%	:	99+ %
EINECS#	:	230-410-7
Hazard Symbols	:	Un Listed
Risk Phrases	:	Un Listed

#### SECTION 3- HAZARDS IDENTIFICATION

##### EMERGENCY OVERVIEW

Appearance: clear red-brown liquid. Flash Point: 60 deg C.  
The toxicological properties of this material have not been fully investigated.

Target Organs:  
Liver.

##### Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

Poison by ingestion. The toxicological properties of this substance have not been fully investigated. May cause headache. May cause nausea and vomiting.

Inhalation:

The toxicological properties of this substance have not been fully investigated. Toxic if inhaled.

Chronic:  
Not available

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#### SECTION 4- FIRST AID MEASURES

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Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Get medical aid immediately. Wash mouth out with water.

Inhalation:

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:

Treat symptomatically and supportively.

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#### SECTION 5- FIRE FIGHTING MEASURES

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General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Will burn if involved in a fire. Combustible liquid.

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

Flash Point:

60 deg C ( 140.00 deg F)

Autoignition Temperature:

Not available.

Explosion Limits, Lower:

Not available.

Upper:

Not available.

NFPA Rating:

Not published.

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#### SECTION 6- ACCIDENTAL RELEASE MEASURES

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General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool.

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#### SECTION 7 - HANDLING and STORAGE

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Handling:

Use spark-proof tools and explosion proof equipment. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood

Storage:

Keep away from sources of ignition. Store in a tightly closed container. Store in a dry area. Keep refrigerated. (Store below 4°C/39°F.)

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SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

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Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits :

Chemical Name : DIMETHYLDISELENIDE  
ACGIH : 0.2 mg/m<sup>3</sup> TWA (as Se) (listed under Selenium compounds).  
NIOSH : 0.2 mg/m<sup>3</sup> TWA (as Se, except Selenium hexafluoride)  
(Listed under Selenium compounds).  
OSHA - Final PELs : 0.2 mg/m<sup>3</sup> TWA (as Se) (listed under Selenium compounds).

OSHA Vacated PELs:

DIMETHYLDISELENIDE: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard En166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

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Physical State	:	Liquid
Appearance	:	clear red-brown
Odor	:	Stench
pH	:	Not available.
Vapor Pressure	:	Not available.
Vapor Density	:	Not available.
Evaporation Rate	:	Not available.
Viscosity	:	Not available.
Boiling Point	:	155 - 157 deg C @ 760.00mm Hg
Freezing/Melting Point	:	0 deg C
Decomposition Temperature	:	Not available.
Solubility	:	Not available.
Specific Gravity/Density	:	1.9870g/cm <sup>3</sup>
Molecular Formula	:	C <sub>2</sub> H <sub>6</sub> Se <sub>2</sub>
Molecular Weight	:	187.99

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SECTION 10 - STABILITY AND REACTIVITY

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Chemical Stability:

Not available.

Conditions to Avoid:

Incompatible materials, ignition sources, excess heat.

Incompatibilities with Other Materials:

Strong oxidizing agents - strong acids.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide, selenium/selenium oxides.

Polymerization:

Has not been reported.

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## SECTION 11 - TOXICOLOGICAL INFORMATION

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RTECS#:

CAS# 7101-31-7 unlisted.

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 7101-31-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology : No information available.

Teratogenicity : No information available.

Reproductive Effects: No information available.

Mutagenicity : No information available.

Neurotoxicity : No information available.

Other Studies:

Un Listed

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## SECTION 12 - ECOLOGICAL INFORMATION

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No information available.

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## SECTION 13 - DISPOSAL CONSIDERATIONS

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Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

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RCRAP-Series : None listed.

RCRA U-Series : None listed.

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## SECTION 14 - TRANSPORT INFORMATION

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US DOT

Shipping Name : DOT regulated - small quantity provisions apply (see 49CFR173.4)

Hazard Class : Un Listed

UN Number : Un Listed

Packing Group : Un Listed

Canada TDG

Shipping Name : TOXIC LIQUID FLAMMABLE ORGANIC NO

Hazard Class : ( DIMETHYLDISELENIDE)  
6.1(3)  
UN Number : Un2929  
Packing Group : II

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## SECTION 15 - REGULATORY INFORMATION

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### US FEDERAL

#### TSCA

CAS# 7101-31-7 is not listed on the TSCA inventory. It is for research and development use only.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding Rqs

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### Section 313:

This material contains DIMETHYLDISELENIDE (listed as Selenium compounds), 99+%, (CAS# 7101-31-7) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

#### Clean Air Act:

CAS# 7101-31-7 (listed as Selenium compounds) is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

#### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

CAS# 7101-31-7 is listed as a Toxic Pollutant under the Clean Water Act.

#### OSHA:

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

#### STATE

CAS# 7101-31-7 can be found on the following state right to know lists: California, (listed as Selenium compounds), Pennsylvania, (listed as Selenium compounds).

California Prop 65:

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

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Risk Phrases:

R 23/25 Toxic by inhalation and if swallowed.

R 33 Danger of cumulative effects.

Safety Phrases:

S 20/21 When using do not eat, drink or smoke.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 28A After contact with skin, wash immediately with plenty of water.

WGK (Water Danger/Protection)

CAS# 7101-31-7: No information available.

Canada - DSL/NDSL:

None of the chemicals in this product are listed on the DSL or NDSL list.

Canada WHMIS:

This product has a WHMIS classification of D1A, D2B.

Canadian Ingredient Disclosure List:

CAS# 7101-31-7 (listed as Selenium compounds) is listed on the Canadian Ingredient Disclosure List.

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#### SECTION 16 - ADDITIONAL INFORMATION

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The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.