

# Material Safety Data Sheet

## [bis(Trimethylsilyl)] Selenide, 98%

ACC# 48398

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** [bis(Trimethylsilyl)] Selenide, 98%

**Catalog Numbers:** AC291670000, AC291670050

**Synonyms:** Hexamethyldisilaneselenane

**Company Identification:**

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

**For information in North America, call:** 800-ACROS-01

**For emergencies in the US, call CHEMTREC:** 800-424-9300

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
4099-46-1	bis(Trimethylsilyl)] Selenide	98%	unlisted

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

**Appearance:** clear, colorless liquid.

**Caution!** Moisture sensitive. The toxicological properties of this material have not been fully investigated.

**Target Organs:** None known.

**Potential Health Effects**

**Eye:** No information regarding eye irritation and other potential effects was found.

**Skin:** No information regarding skin irritation and other potential effects was found.

**Ingestion:** The toxicological properties of this substance have not been fully investigated.

**Inhalation:** The toxicological properties of this substance have not been fully investigated.

**Chronic:** Chronic exposure to selenium may cause pallor, garlic breath, metallic taste, anemia, liver and spleen damage.

### Section 4 - First Aid Measures

**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:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**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.

### Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:** Do NOT use water directly on fire. Use carbon dioxide or dry chemical.

**Flash Point:** Not available.

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** Not published.

### Section 6 - Accidental Release Measures

**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.

### Section 7 - Handling and Storage

**Handling:** Use only in a well-ventilated area. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Do not allow contact with water.

**Storage:** Store in a cool, dry place. Store in a tightly closed container. Keep under a nitrogen blanket.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
bis(Trimethylsilyl)] Selenide	0.2 mg/m <sup>3</sup> TWA (as Se) (listed under Selenium compounds).	6 mg/m <sup>3</sup> TWA (listed under Silica, amorphous).0.2 mg/m <sup>3</sup> TWA (as Se, except Selenium hexafluoride) (listed under Selenium compounds).3000 mg/m <sup>3</sup> IDLH (listed under Silica, amorphous).	0.2 mg/m <sup>3</sup> TWA (as Se) (listed under Selenium compounds).

**OSHA Vacated PELs:** bis(Trimethylsilyl)] Selenide: 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.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** clear, colorless

**Odor:** Stench

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 31 deg C @ 2.00mm Hg

**Freezing/Melting Point:**-7 deg C

**Decomposition Temperature:** Not available.

**Solubility:** Not available.

**Specific Gravity/Density:** .9010g/cm<sup>3</sup>

**Molecular Formula:** C<sub>6</sub>H<sub>18</sub>SeSi<sub>2</sub>

**Molecular Weight:** 225.34

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, exposure to moist air or water.

**Incompatibilities with Other Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, silicon dioxide, selenium/selenium oxides.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#:** 4099-46-1 unlisted.

**LD50/LC50:**

Not available.

**Carcinogenicity:**

CAS# 4099-46-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** Not available.

**Teratogenicity:** Not available.

**Reproductive Effects:** Not available.

**Mutagenicity:** Not available.

**Neurotoxicity:** Not available.

**Other Studies:**

## Section 12 - Ecological Information

No information available.

## Section 13 - Disposal Considerations

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.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	<b>US DOT</b>	<b>Canada TDG</b>
<b>Shipping Name:</b>	DOT regulated - small quantity provisions apply (see 49CFR173.4)	No information available.
<b>Hazard Class:</b>		
<b>UN Number:</b>		
<b>Packing Group:</b>		

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 4099-46-1 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 bis(Trimethylsilyl)] Selenide (listed as Selenium compounds), 98%, (CAS# 4099-46-1) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

#### Clean Air Act:

CAS# 4099-46-1 (listed as Selenium compounds) is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

#### 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# 4099-46-1 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# 4099-46-1 can be found on the following state right to know lists: California, (listed as Silica, amorphous), California, (listed as Selenium compounds), New Jersey, (listed as Silica, amorphous), Pennsylvania, (listed as Silica, amorphous), Pennsylvania, (listed as Selenium compounds), Minnesota, (listed as Silica, amorphous), Massachusetts, (listed as Silica, amorphous).

#### 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:

Not available.

##### Risk Phrases:

##### 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# 4099-46-1: No information available.

#### Canada - DSL/NDSL

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

#### Canada - WHMIS

WHMIS: Not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

#### Canadian Ingredient Disclosure List

CAS# 4099-46-1 (listed as Silica, amorphous) is listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

**MSDS Creation Date:** 9/02/1997

**Revision #3 Date:** 10/03/2005

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