

# Material Safety Data Sheet

## (Trimethylsilyl)methyl lithium, 1M solution in hexanes

ACC# 14527

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** (Trimethylsilyl)methyl lithium, 1M solution in hexanes

**Catalog Numbers:** AC377450000

**Synonyms:**

**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
110-54-3	Hexane	45-50	203-777-6
92112-69-1	Hexanes	37-40	295-570-2
1822-00-0	Trimethylsilylmethyl lithium	10-30	unlisted
110-82-7	Cyclohexane	2.5-3	203-806-2

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Not available. Appearance: Not available. Flash Point: -18 deg C.

Not available.

**Target Organs:** Respiratory system, gastrointestinal system, eyes, skin.

#### Potential Health Effects

**Eye:** Causes eye burns.

**Skin:** Causes skin burns.

**Ingestion:** Causes gastrointestinal tract burns. May cause lung damage.

**Inhalation:** Causes chemical burns to the respiratory tract. Inhalation of vapors may cause drowsiness and dizziness.

**Chronic:** May impair fertility.

### 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:** Do not induce vomiting. 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. Will burn if involved in a fire. Water reactive. Material will react with water and may release a flammable and/or toxic gas. Flammable liquid and vapor. Reacts violently with water. May be ignited by heat, sparks, and flame.

**Extinguishing Media:** Do NOT use carbon dioxide. DO NOT USE WATER! Use dry chemical.

**Flash Point:** -18 deg C ( -0.40 deg F)

**Autoignition Temperature:** Not available.

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

**Upper:** Not available.

**NFPA Rating:** 3 - flammability, 0 - instability

### 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. Remove all sources of ignition. Use a spark-proof tool. Do not expose spill to water. Do not get water inside containers. Do not let this chemical enter the environment.

## Section 7 - Handling and Storage

**Handling:** Use spark-proof tools and explosion proof equipment. Do not breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use and store under nitrogen. Do not allow contact with water. Use only in a chemical fume hood.

**Storage:** Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area. Corrosives area. Store under nitrogen.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Hexane	50 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route	50 ppm TWA; 180 mg/m <sup>3</sup> TWA 1100 ppm IDLH	500 ppm TWA; 1800 mg/m <sup>3</sup> TWA
Hexanes	none listed	none listed	none listed
Trimethylsilylmethyl lithium	none listed	none listed	none listed
Cyclohexane	100 ppm TWA	300 ppm TWA; 1050 mg/m <sup>3</sup> TWA 1300 ppm IDLH	300 ppm TWA; 1050 mg/m <sup>3</sup> TWA

**OSHA Vacated PELs:** Hexane: 50 ppm TWA; 180 mg/m<sup>3</sup> TWA Hexanes: No OSHA Vacated PELs are listed for this chemical.

Trimethylsilylmethyl lithium: No OSHA Vacated PELs are listed for this chemical. Cyclohexane: 300 ppm TWA; 1050 mg/m<sup>3</sup> TWA

### Personal Protective Equipment

**Eyes:** Wear chemical splash goggles.

**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:** Not available.

**Odor:** solvent odor

**pH:** >7

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 65 - 70 deg C

**Freezing/Melting Point:** Not available.

**Decomposition Temperature:** Not available.

**Solubility:** reacts violently to tetramethylsilane and

**Specific Gravity/Density:** Not available.

**Molecular Formula:** C<sub>4</sub>H<sub>11</sub>LiSi

**Molecular Weight:** 94.16

## Section 10 - Stability and Reactivity

**Chemical Stability:** Reacts with water.

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

**Incompatibilities with Other Materials:** Water, strong oxidizing agents, acids, alcohols, carbon dioxide, hydrogen, halides.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, lithium hydroxide, oxides of silicon.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

### RTECS#:

**CAS#** 110-54-3: MN9275000

**CAS#** 92112-69-1 unlisted.

**CAS#** 1822-00-0 unlisted.

**CAS#** 110-82-7: GU6300000

### LD50/LC50:

**CAS#** 110-54-3:

Draize test, rabbit, eye: 10 mg Mild;

Inhalation, mouse: LC50 = 150000 mg/m<sup>3</sup>/2H;

Inhalation, rat: LC50 = 48000 ppm/4H;

Inhalation, rat: LC50 = 627000 mg/m<sup>3</sup>/3M;

Oral, rat: LD50 = 25 gm/kg;

CAS# 92112-69-1:

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CAS# 1822-00-0:

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CAS# 110-82-7:

Draize test, rabbit, skin: 1548 mg/2D (Intermittent);

Inhalation, mouse: LC50 = 70000 mg/m3/2H;

Oral, mouse: LD50 = 813 mg/kg;

Oral, rat: LD50 = 12705 mg/kg;

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**Carcinogenicity:**

CAS# 110-54-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 92112-69-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 1822-00-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 110-82-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No data available.

**Teratogenicity:** No data available.

**Reproductive Effects:** No data available.

**Mutagenicity:** No data available.

**Neurotoxicity:** No data available.

**Other Studies:**

## Section 12 - Ecological Information

**Ecotoxicity:** No data available. No information available.

**Environmental:** No information available.

**Physical:** No information available.

**Other:** Do not empty into drains.

## 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:**

CAS# 110-82-7: waste number U056 (Ignitable waste).

## Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE*	No information available.
<b>Hazard Class:</b>	4.3	
<b>UN Number:</b>	UN3399	
<b>Packing Group:</b>	I	

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 110-54-3 is listed on the TSCA inventory.

CAS# 92112-69-1 is not listed on the TSCA inventory. It is for research and development use only.

CAS# 1822-00-0 is not listed on the TSCA inventory. It is for research and development use only.

CAS# 110-82-7 is listed on the TSCA inventory.

#### Health & Safety Reporting List

CAS# 110-82-7: Effective 12/19/85, Sunset 12/19/95

#### Chemical Test Rules

CAS# 110-82-7: 40 CFR 799.5000

#### 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

CAS# 110-54-3: 5000 lb final RQ; 2270 kg final RQ      CAS# 110-82-7: 1000 lb final RQ; 454 kg final RQ

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 110-54-3: immediate, delayed, fire.

CAS # 110-82-7: immediate, delayed, fire.

#### Section 313

This material contains Hexane (CAS# 110-54-3, 45-50%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

This material contains Cyclohexane (CAS# 110-82-7, 2.5-3%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

**Clean Air Act:**

CAS# 110-54-3 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:**

CAS# 110-82-7 is listed as a Hazardous Substance under the CWA.

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

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

**OSHA:**

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

**STATE**

CAS# 110-54-3 can be found on the following state right to know lists: New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 92112-69-1 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 1822-00-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 110-82-7 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

**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:**

F C N

**Risk Phrases:**

R 14 Reacts violently with water.

R 34 Causes burns.

R 48/20 Harmful : danger of serious damage to health by prolonged exposure through inhalation.

R 62 Possible risk of impaired fertility.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 65 Harmful: may cause lung damage if swallowed.

R 67 Vapours may cause drowsiness and dizziness.

**Safety Phrases:**

S 16 Keep away from sources of ignition - No smoking.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 33 Take precautionary measures against static discharges.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 43 In case of fire, use ... (indicate in the space the precise type of fire-fighting equipment. If water increases the risk, add - never use water).

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

S 6 Keep under ... (inert gas to be specified by the manufacturer).

**WGK (Water Danger/Protection)**

CAS# 110-54-3: 1

CAS# 92112-69-1: No information available.

CAS# 1822-00-0: No information available.

CAS# 110-82-7: 1

**Canada - DSL/NDSL**

CAS# 110-54-3 is listed on Canada's DSL List.

CAS# 110-82-7 is listed on Canada's DSL List.

**Canada - 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# 110-54-3 is listed on the Canadian Ingredient Disclosure List.

CAS# 110-82-7 is listed on the Canadian Ingredient Disclosure List.

**Section 16 - Additional Information**

**MSDS Creation Date:** 7/13/2006

**Revision #0 Date:** Original.

*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.*