**NAME USED ON LABEL:** LITHIUM BIS(Trimethylsilyl)AMIDE 1M - SIL6467.4  
**CHEMICAL NAME:** LITHIUM BIS(Trimethylsilyl)AMIDE 1M in TETRAHYDROFURAN  
**SYNONYMS:** LITHIUM HEXAMETHYLDISILAZIDE in TETRAHYDROFURAN  
**CHEMICAL FAMILY:** ORGANOSILANE  
**FORMULA:** C_{6}H_{18}NLiSi_{2}  
**HMIS CODES**  
- **HEALTH:** 3  
- **FLAMMABILITY:** 4  
- **REACTIVITY:** 1  

### INGREDIENTS

<table>
<thead>
<tr>
<th>Identity</th>
<th>CAS No.</th>
<th>% TLV</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>LITHIUM BIS(Trimethylsilyl)AMIDE</td>
<td>4039-32-1</td>
<td>18-25</td>
<td>not established</td>
</tr>
<tr>
<td>TETRAHYDROFURAN</td>
<td>109-99-9</td>
<td>75-82</td>
<td>50ppm</td>
</tr>
</tbody>
</table>

### PHYSICAL DATA

- **Boiling Point:** 114-6°C-1mm (sub)  
- **Specific Gravity:** 0.89  
- **Vapor Density (air=1):** 2.5-THF  
- **% volatiles:** N/A  
- **Molecular Weight:** 167.33  
- **Appearance & Color:** Clear to hazy liquid

### FIRE & EXPLOSION DATA

- **Flash Point, COC:** -17°C (1.4°F)  
- **Autoignition Temp.:** not determined  
- **Flammability Limits (THF)- LEL:** 1.8%  
- **UEL:** 11.6%  

Lithium bis(trimethylsilyl)amide is a flammable solid. Similar materials have been reported to ignite spontaneously if heated to > 170°C in air.

Extinguishing Media: Foam, carbon dioxide, dry chemical.  
Special Fire Fighting Procedures: Avoid water spray as flammable gases will be generated. Avoid eye and skin contact. Do not breathe fumes or inhale vapors.  
Unusual Fire and Explosion Hazards: Irritating fumes and caustic vapors may develop when material is exposed to elevated temperatures or open flame.

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose, LC: Lethal Concentration; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; HMIS: Hazardous Material information System; CAS No.: Chemical Abstract Service Registration Number
ENVIRONMENTAL INFORMATION

Spill response: Ventilate area. Eliminate ignition sources. Absorb material with a dry non-combustible absorbent. Take to a chemical disposal area, then follow disposal methods.

Recommended disposal: Treat quantities of 1000 grams or less by careful addition of dry isopropanol under controlled conditions in an exhausted area. Solution will be caustic. The solution can be incinerated. Follow all chemical pollution control regulations.

HEALTH HAZARD DATA

Eye Contact: Lithium bis(trimethylsilyl)amide will cause immediate or delayed severe caustic burns to the eyes.

Skin contact: Will cause irritation and burns. Worker will notice a slippery feeling on washing.

Inhalation: Inhalation will cause sneezing, irritation and burns.

Oral Toxicity: not determined
Chronic Toxicity: not determined
Chronic Toxicity-TETRAHYDROFURAN: Mildly toxic by inhalation. Mutagenic data has been reported. Reported as causing injury to liver and kidneys.

SUGGESTED FIRST AID

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

SKIN: Immediately shake or brush off any loose material, then flush with water for at least fifteen minutes.

INHALATION: Move exposed individual to fresh air. Administer oxygen if needed. Call a physician.

INGESTION: Never give fluids or induce vomiting if patient is unconscious or having convulsions. Give a demulscent such as milk, olive oil, or margarine in small amounts, up to two or three tablespoons.

REACTIVITY DATA

Stability: Stable under nitrogen or argon in sealed containers.

Conditions to avoid: Material decomposes slowly in contact with moist air and rapidly in contact with water, possibly igniting. Avoid contact with moist air, water, acids, alcohols, ketones, esters, carbon dioxide, halogens.

Hazardous decomposition products: Lithium hydroxide, ammonia, hexamethyldisiloxane and caustic organic vapors.
SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.
Respiratory Protection: If exposure exceeds TLV, a NIOSH approved particulate filter-type respirator should be worn.
Eye and Face Protection: Chemical worker’s goggles. Do not wear contact lenses.
Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. Long-sleeved fire-resistant lab uniform or coverall is recommended. An eyewash and emergency shower should be available. Launder clothing before reuse.

OTHER PRECAUTIONS

For research and industrial use only.

Storage and Handling: Store under dry nitrogen or argon in sealed containers below 25°C.

TRANSPORTATION

DOT SHIPPING NAME: FLAMMABLE LIQUID, CORROSIVE N.O.S., (LITHIUM BIS(TRIMETHYLSILYL)AMIDE
DOT HAZARD CLASS: 3 SUB: 8
DOT LABELS: FLAMMABLE LIQUID & CORROSIVE
DOT ID No: UN2924 PG: II

Prepared by safety and environmental affairs ISSUE DATE SIL6467.4: 7/23/03 SUPERSEDES: 11/30/99

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