n-BUTYLLITHIUM, 2.5M in hexanes (22-24 wt %)

Safety Data Sheet OMLI012

Date of issue: 06/14/2016  Revision date: 05/31/2019  Version: 1.1

SECTION 1: Identification

1.1. Identification

Product name: n-BUTYLLITHIUM, 2.5M in hexanes (22-24 wt %)
Product code: OMLI012
Product form: Mixture
Physical state: Liquid
Formula: C4H11LiSi
Chemical family: METAL ALKYL

1.2. Recommended use and restrictions on use

Recommended use: Chemical intermediate

1.3. Supplier

GELEST, INC.
11 East Steel Road
Morrisville, PA 19067
USA
T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST
info@gelest.com - www.gelest.com

1.4. Emergency telephone number

Emergency number: CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable liquids Category 2
Pyrophoric liquids Category 1
Substances and mixtures which in contact with water emit flammable gases Category 1
Skin corrosion/irritation Category 1B
Serious eye damage/eye irritation Category 1
Reproductive toxicity Category 2
Specific target organ toxicity (single exposure) Category 3
Specific target organ toxicity (repeated exposure) Category 2

Hazardous to the aquatic environment - Acute Hazard Category 2

Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS US):

Signal word (GHS US): Danger

Hazard statements (GHS US): H225 - Highly flammable liquid and vapor
H250 - Catches fire spontaneously if exposed to air
H260 - In contact with water releases flammable gases which may ignite spontaneously
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H361 - Suspected of damaging fertility or the unborn child
H336 - May cause drowsiness or dizziness
H366 - May cause damage to organs through prolonged or repeated exposure
H401 - Toxic to aquatic life

Precautionary statements (GHS US):

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P310 - Immediately call a doctor
P210 - Keep away from heat, open flames, sparks. - No smoking.
P222 - Do not allow contact with air.
P223 - Do not allow contact with water.
P231+P232 - Handle under inert gas. Protect from moisture
P240 - Ground/Bond container and receiving equipment
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2.3. Hazards not otherwise classified (HNOC)
No additional information available

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier (CAS-No.)</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexane</td>
<td>110-54-3</td>
<td>76 - 78</td>
<td>Flam. Liq. 2, H225</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Irrit. 2A, H319</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Repr. 2, H361</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT SE 3, H336</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT RE 2, H373</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Asp. Tox. 1, H304</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Acute 2, H401</td>
</tr>
<tr>
<td>Butyl lithium</td>
<td>109-72-8</td>
<td>22 - 24</td>
<td>Pyr. Liq. 1, H250</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Water-react. 1, H260</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Corr. 1B, H314</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Dam. 1, H318</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general: Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.

First-aid measures after inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact: Wash with plenty of soap and water. Get immediate medical advice/attention.

First-aid measures after eye contact: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid measures after ingestion: Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects: Suspected of damaging fertility. Suspected of damaging the unborn child. Causes damage to organs through prolonged or repeated exposure.

Symptoms/effects after inhalation: May cause drowsiness or dizziness. Direct respiratory contact is usually not possible, but will cause burns. Inhalation of combustion products can cause irritation.

Symptoms/effects after skin contact: Causes (severe) skin burns.

Symptoms/effects after eye contact: Causes serious eye damage.
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### Symptoms/effects after ingestion

- **Chronic symptoms**: LITHIUM HYDROXIDE, the oxidation/hydrolysis product, is considered moderately toxic.
- **Chronic symptoms**: Chronic Toxicity-hexane: Overexposure to hexane may cause progressive and potentially irreversible damage to the peripheral nervous system, particularly in the arms and legs.

### Immediate medical attention and special treatment, if necessary

No additional information available

## SECTION 5: Fire-fighting measures

### Suitable (and unsuitable) extinguishing media

- **Suitable extinguishing media**: Dry chemical powder followed by sand or dolomite.
- **Unsuitable extinguishing media**: Water.

### Specific hazards arising from the chemical

- **Fire hazard**: Catches fire spontaneously if exposed to air. Pyrophoric liquid. Highly flammable liquid and vapor.
- **Explosion hazard**: Container may explode during fire conditions. May form flammable/explosive vapor-air mixture.

### Special protective equipment and precautions for fire-fighters

- **Firefighting instructions**: If material is ignited, allow to burn. Exercise caution when fighting any chemical fire. In case of fire: Stop leak if safe to do so.
- **Protection during firefighting**: Do not enter fire area without proper protective equipment, including respiratory protection. Avoid all eye and skin contact and do not breathe vapor and mist.
- **Other information**: Can spontaneously ignite on contact with air. Pyrophoric liquid and gas.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- **General measures**: Eliminate every possible source of ignition. Use special care to avoid static electric charges.

#### For non-emergency personnel

- **Protective equipment**: Wear protective equipment as described in Section 8.
- **Emergency procedures**: Evacuate unnecessary personnel.

#### For emergency responders

- **Protective equipment**: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: “Exposure controls/personal protection”.

### Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### Methods and material for containment and cleaning up

#### For containment

- **Methods for cleaning up**: Concentrate containment efforts to adjacent combustibles.

#### Methods for cleaning up

- **For cleaning up**: Cover with dry chemical extinguishing powder, lime, sand or soda ash. Do not use water. Remove combustible materials in the vicinity of the spill. Allow time for decomposition or fire to burn out, then sweep material and transfer to a suitable container for disposal. Use only non-sparking tools.

### Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### Precautions for safe handling

- **Additional hazards when processed**: Handle empty containers with care because residual vapors are flammable. Keep away from any possible contact with water, because of violent reaction and possible flash fire. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

#### Precautions for safe handling

- **Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid all eye and skin contact and do not breathe vapor and mist. Use only outdoors or in a well-ventilated area. Do not allow contact with water. Handle under inert gas. Protect from moisture. Only personnel fully trained in the handling of pyrophoric materials should be permitted to work with this material. Use only non-sparking tools. Do not allow contact with air.**

#### Hygiene measures

- **Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.**

### Conditions for safe storage, including any incompatibilities

#### Technical measures

- **Laboratory and production areas must be equipped with special fire-extinguishing media for pyrophorics. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical equipment.**

#### Storage conditions

- **Keep container tightly closed. Flammable and combustible materials should not be stored in or near working areas for pyrophorics. Store in a dry place. Protect from moisture.**
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**Storage area**: Store in a well-ventilated place. Store away from heat.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<table>
<thead>
<tr>
<th>Hexane (110-54-3)</th>
<th>ACGIH TWA (ppm)</th>
<th>OSHA PEL (TWA) (mg/m³)</th>
<th>OSHA PEL (TWA) (ppm)</th>
<th>IDLH US IDLH (ppm)</th>
<th>NIOSH REL (TWA) (mg/m³)</th>
<th>NIOSH REL (TWA) (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td></td>
<td>50 ppm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSHA</td>
<td></td>
<td>1800 mg/m³</td>
<td>500 ppm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSHA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1100 ppm (10% LEL)</td>
<td></td>
</tr>
<tr>
<td>IDLH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NIOSH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>180 mg/m³</td>
<td></td>
</tr>
<tr>
<td>NIOSH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50 ppm</td>
<td></td>
</tr>
</tbody>
</table>

#### 8.2. Appropriate engineering controls

Appropriate engineering controls: Glove box or sealed system under inert atmosphere is required. Provide local exhaust or general room ventilation.

#### 8.3. Individual protection measures/Personal protective equipment

**Personal protective equipment:**

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

**Hand protection:**

Neoprene or nitrile rubber gloves

**Eye protection:**

Chemical goggles or face shield. Contact lenses should not be worn

**Skin and body protection:**

Wear suitable protective clothing

**Respiratory protection:**

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified organic vapor (black cartridge) respirator.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear liquid. Fumes and ignites in air.</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>64.06 g/mol</td>
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<tr>
<td>Color</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Refractive index</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>&lt; 0 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>-23 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>&lt; 100 °C PYROPHORIC</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Highly flammable liquid and vapor, Catches fire spontaneously if exposed to air</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>150 mm Hg @ 20°C</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>3 (hexane)</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.695</td>
</tr>
<tr>
<td>Solubility</td>
<td>Reacts violently with water.</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
</tbody>
</table>
n-BUTYLLITHIUM, 2.5M in hexanes (22-24 wt %)
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Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosion limits : 1.8 - 11.6 vol % (lower; upper: hexane)

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Stable in sealed containers under dry inert atmosphere.

10.3. Possibility of hazardous reactions
The product can generate small amounts of butane when exposed to alkalis and protic materials such as water and alcohol. Decomposes at temperatures greater than 140°C.

10.4. Conditions to avoid
Heat. Open flame. Sparks.

10.5. Incompatible materials

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified

<table>
<thead>
<tr>
<th>Hexane (110-54-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
</tr>
<tr>
<td>LC50 inhalation rat (ppm)</td>
</tr>
<tr>
<td>ATE US (oral)</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
</tr>
<tr>
<td>ATE US (gases)</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Causes severe skin burns and eye damage.
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Suspected of damaging fertility or the unborn child.
Hexane is mildly toxic by inhalation and is reported as an experimental teratogen.

Specific target organ toxicity – single exposure : May cause drowsiness or dizziness.

Specific target organ toxicity – repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified
Potential Adverse human health effects and symptoms : Impairment of coordination, distorted perception and CNS disturbances have been reported to Hexane.
Symptoms/effects after inhalation : May cause drowsiness or dizziness. Direct respiratory contact is usually not possible, but will cause burns. Inhalation of combustion products can cause irritation.
Symptoms/effects after skin contact : Causes (severe) skin burns.
Symptoms/effects after eye contact : Causes serious eye damage.
Symptoms/effects after ingestion : LITHIUM HYDROXIDE, the oxidation/hydrolysis product, is considered moderately toxic.
Chronic symptoms : Chronic Toxicity-hexane: Overexposure to hexane may cause progressive and potentially irreversible damage to the peripheral nervous system, particularly in the arms and legs.
Reason for classification : Expert judgment
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SECTION 12: Ecological information

12.1. Toxicity
Ecology - general : Toxic to aquatic life.

Hexane (110-54-3)
LC50 fish 1 : 2.1 - 2.98 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Effect on the ozone layer : No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods
Sewage disposal recommendations : Do not dispose of waste into sewer.
Product/Packaging disposal recommendations : Incinerate. Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility. This is a RCRA hazardous waste: 40 CFR 261.21 (i.e. ignitable) 40 CFR 261.23 (i.e. reactive).
Additional information : Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

14.1. UN number
UN-No.(DOT) : 3394
DOT NA No : UN3394

14.2. UN proper shipping name
Transport document description : UN3394 Organometallic substance, liquid, pyrophoric, water-reactive (n-BUTYLLITHIUM, 2.5M in hexanes (22-24 wt %)), 4.2 (4.3), I
Proper Shipping Name (DOT) : Organometallic substance, liquid, pyrophoric, water-reactive (n-BUTYLLITHIUM, 2.5M in hexanes (22-24 wt %))
Class (DOT) : 4.2 - Class 4.2 - Spontaneously combustible material 49 CFR 173.124
Packing group (DOT) : I - Great Danger
Hazard labels (DOT) : 4.2 - Spontaneously combustible
 : 4.3 - Dangerous when wet

DOT Packaging Non Bulk (49 CFR 173.xxx) : 181
DOT Packaging Bulk (49 CFR 173.xxx) : 244
DOT Packaging Exceptions (49 CFR 173.xxx) : None
DOT Symbols : G - Identifies PSN requiring a technical name

14.3. Additional information
Emergency Response Guide (ERG) Number : 135
Other information : No supplementary information available.

Transport by sea
DOT Vessel Stowage Location : D - The material must be stowed “on deck only” on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded.
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DOT Vessel Stowage Other: 13 - Keep as dry as reasonably practicable, 52 - Stow "separated from" acids, 78 - Stow "separated longitudinally by an intervening complete compartment or hold from" explosives, 148 - In addition: from flammable gases and flammable liquids when stowed on deck of a containership a minimum distance of two container spaces athwartship shall be maintained, when stowed on ro-ro ships a distance of 6 m athwartship shall be maintained.

Air transport
DOT Quantity Limitations Passenger aircraft/rail: Forbidden (49 CFR 173.27)
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75): Forbidden

SECTION 15: Regulatory information

15.1. US Federal regulations

Hexane (110-54-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Subject to reporting requirements of United States SARA Section 313
SARA Section 313 - Emission Reporting: 1 %

Butyl lithium (109-72-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA
Hexane (110-54-3)
Listed on the Canadian DSL (Domestic Substances List)
WHMIS Classification: Class B Division 2 - Flammable Liquid, Class D Division 2 Subdivision A - Very toxic material causing other toxic effects, Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Butyl lithium (109-72-8)
Listed on the Canadian DSL (Domestic Substances List)
WHMIS Classification: Class B Division 6 - Reactive Flammable Material

EU-Regulations
Hexane (110-54-3)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Butyl lithium (109-72-8)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Hexane (110-54-3)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on the Canadian IDL (Ingredient Disclosure List)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)

Butyl lithium (109-72-8)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations
California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm
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Hexane (110-54-3)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Butyl lithium (109-72-8)
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Full text of H-phrases::

<table>
<thead>
<tr>
<th>H225</th>
<th>Highly flammable liquid and vapor</th>
</tr>
</thead>
<tbody>
<tr>
<td>H250</td>
<td>Catches fire spontaneously if exposed to air</td>
</tr>
<tr>
<td>H260</td>
<td>In contact with water releases flammable gases which may ignite spontaneously</td>
</tr>
<tr>
<td>H304</td>
<td>May be fatal if swallowed and enters airways</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H336</td>
<td>May cause drowsiness or dizziness</td>
</tr>
<tr>
<td>H361</td>
<td>Suspected of damaging fertility or the unborn child</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure</td>
</tr>
<tr>
<td>H401</td>
<td>Toxic to aquatic life</td>
</tr>
</tbody>
</table>

Abbreviations and acronyms:

| Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor. |

Hazard Rating

Health: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability: 4 Severe Hazard - Flammable gases, or very volatile flammable liquids with flash points below 73 F, and boiling points below 100 F. Materials may ignite spontaneously with air. (Class IA)

Physical: 2 Moderate Hazard - Materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air.

Prepared by safety and environmental affairs.

Date of issue: 06/14/2016 Revision date: 05/31/2019 Version: 1.1

SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore. Information on this safety data sheet is not intended to constitute a basis for product specifications.

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