Section 1. Product and Company Identification

Product Name: Dipropyl Disulfide
Product ID: D3261
Chemical Name: 4,5-Dithiaoctane; Di-n-propyl disulfide; n-Propyl disulfide; Propyldithiopropane; n-Propyl disulfide; Propyl disulfide

Supplier: LKT Laboratories, Inc
545 Phalen Blvd.
St. Paul, MN 55130 USA
Ph: 651-644-8424 Fax: 651-644-8357
www.lktlabs.com - getinfo@lktlabs.com

Emergency Phone #: 1-800-424-9300

Section 2. Hazards Identification

GHS Classification:
- Flammable liquids (Category 4), H227
- Acute aquatic toxicity (Category 2), H401

GHS Label elements including precautionary statements

Pictogram:

Signal word: Warning

Hazard and precautionary statements:
- H227 - Combustible liquid.
- H401 - Toxic to aquatic life.
- P210 - Keep away from heat, sparks, open flames, and hot surfaces. - No smoking.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves, protective clothing, eye protection, and face protection.
- P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
- P403 + P235 - Store in a well-ventilated place. Keep cool.
- P501 - Dispose of contents/container to an approved waste disposal plant.

HMIS Classification:
- Health hazard: 0
- Chronic health hazard: *
- Flammability: 2
- Physical hazard: 0

NFPA Rating:
- Health hazard: 0
- Fire hazard: 2
- Reactivity hazard: 0

Potential Health Effects:
- Inhalation - May be harmful if inhaled. May cause respiratory tract irritation.
- Skin - May be harmful if absorbed through skin. May cause skin irritation.
- Eyes - May cause eye irritation.
Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>Ingredient: Title Compound</th>
<th>Percent: 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>C_6H_14S_2</td>
<td>Formula Wt.: 150.31</td>
</tr>
<tr>
<td>CAS No.</td>
<td>629-19-6</td>
<td>EC No.: 211-079-8</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Eye Contact
Flush eyes with water as a precaution.

Skin Contact
Wash off with soap and plenty of water. Consult a physician.

Inhalation
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5. Firefighting Measures

Flash Point
64˚C

Extinguishing Media
Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide. Use water spray to cool unopened containers.

Firefighting Procedures
Wear self-contained breathing apparatus for firefighting if necessary.

Unusual Fire Hazards
Carbon oxides, sulfur oxides.

Section 6. Accidental Release Measures

Personal Precautions
Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental Precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleanup
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulation (see section 13). Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

Handling
Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Storage Conditions
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature: Ambient

Hazardous Decomposition Products
Not available.

Other Remarks

### Section 8. Exposure Controls/Personal Protection

**Personal protective equipment**

- **EXPOSURE CONTROLS**: Contains no substances with occupational exposure limit values. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

- **PERSONAL PROTECTION**: Safety glasses with side-shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Skin protection**: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Splash contact - Material: Nitrile rubber, Minimum layer thickness: 0.4 mm, Break through time: 30 min., Material tested: Camatl® (KCL 730 / Aldrich Z677442, Size M).

**Body protection**: Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**: Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid.</td>
<td>Clear, colorless liquid.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>195-196°C</td>
</tr>
<tr>
<td>Melting Point</td>
<td>-86°C</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>64°C</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Insoluble in water.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>64°C</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.96 g/cm3 at 25°C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Section 10. Stability and Reactivity

**Stability**: Stable under recommended storage conditions.

**Materials To Avoid**: Strong oxidizing agents, strong bases.

**Hazardous Decomposition Products**: Not available.
### Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oral LD50</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Inhalation LC50</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Dermal LD50</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Other information on acute toxicity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Reproductive Toxicity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Specific organ toxicity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Specific organ toxicity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Teratogenicity</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

#### Skin corrosion/irritation
Not available.

#### Serious eye damage/irritation
Not available.

#### Respiratory or skin sensitization
Not available.

#### Germ cell mutagenicity
Not available.

### Carcinogenicity
- **IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
- **ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- **NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- **OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Reproductive Toxicity
Not available.

### Specific organ toxicity repetition exposure (GHS)
Not available.

### Aspiration Hazard
Not available.

### Synergistic effects
Not available.

### Potential Health Effects
- **Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.
- **Skin:** May be harmful if absorbed through skin. May cause skin irritation.
- **Eyes:** May cause eye irritation.
- **Ingestion:** May be harmful if swallowed.

### Additional Information
- **RTECS:** JO1955000
- **To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.**

### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toxicity</strong></td>
<td>Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 2.62 mg/l - 96 h.</td>
</tr>
<tr>
<td><strong>Mobility in soil</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>PBT and vPvB assessment</strong></td>
<td>PBT/vPvB assessment not available as chemical safety assessment not required/not available</td>
</tr>
</tbody>
</table>
Section 13. Disposal Considerations

**Waste Disposal**
Dispose of material according to all federal, state, and local regulations. Offer material to a licensed, professional waste disposal company. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Dispose of as unused product.

Section 14. Transport Information

**DOT (US)**
- UN number: 3334
- Class: 9
- Packing Group: III
- Proper shipping name: Aviation regulated liquid, n.o.s. (Dipropyl disulfide)
- Reportable Quantity (RQ): No
- Marine pollutant: No
- Poison inhalation hazard: No

**IATA**
- UN number: 3334
- Class: 9
- Packing group: III
- Proper shipping name: Aviation regulated liquid, n.o.s. (Dipropyl disulfide)

**IMDG**
Not dangerous goods.

Further Information

Section 15. Regulatory Information

**Reach No.**

**SARA 302 Components**
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Components**
Fire hazard

**Massachusetts Right To Know Components**
No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**
- Dipropyl Disulfide
- CAS #: 629-19-6
- Revision Date:

**New Jersey Right To Know Components**
- Dipropyl Disulfide
- CAS #: 629-19-6
- Revision Date:

**California Prop 65 Components**
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. Other Information

**Other information**
The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.