Material Safety Data Sheet
Propionaldehyde MSDS

Section 1: Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name: Propionaldehyde</th>
<th>Contact Information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Codes: SLP3472</td>
<td>Sciencelab.com, Inc.</td>
</tr>
<tr>
<td>CAS#: 123-38-6</td>
<td>14025 Smith Rd.</td>
</tr>
<tr>
<td>RTECS: UE0350000</td>
<td>Houston, Texas 77396</td>
</tr>
<tr>
<td>TSCA: TSCA 8(b) inventory: Propionaldehyde</td>
<td>US Sales: 1-800-901-7247</td>
</tr>
<tr>
<td>CI#: Not available.</td>
<td>International Sales: 1-281-441-4400</td>
</tr>
<tr>
<td>Synonym: Propanal</td>
<td>Order Online: ScienceLab.com</td>
</tr>
<tr>
<td>Chemical Formula: C3H6O</td>
<td>CHEMTREC (24HR Emergency Telephone), call:</td>
</tr>
<tr>
<td></td>
<td>1-800-424-9300</td>
</tr>
<tr>
<td></td>
<td>International CHEMTREC, call: 1-703-527-3887</td>
</tr>
<tr>
<td></td>
<td>For non-emergency assistance, call: 1-281-441-4400</td>
</tr>
</tbody>
</table>

Section 2: Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propionaldehyde</td>
<td>123-38-6</td>
<td>100</td>
</tr>
</tbody>
</table>

Toxicological Data on Ingredients: Propionaldehyde: ORAL (LD50): Acute: 1410 mg/kg [Rat]. 1200 mg/kg [Rat]. DERMAL (LD50): Acute: 5040 mg/kg [Rabbit]. VAPOR (LC50): Acute: 10900 ppm 4 hour(s) [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects:
Very hazardous in case of ingestion, of inhalation. Hazardous in case of skin contact (irritant), of eye contact (irritant).

Potential Chronic Health Effects:
Very hazardous in case of inhalation. Hazardous in case of skin contact (irritant), of eye contact (irritant). CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.
Skin Contact:
After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion:
Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: 207°C (404.6°F)


Flammable Limits: LOWER: 2.6% UPPER: 17%

Products of Combustion: These products are carbon oxides (CO, CO2).


Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
Flammable liquid, soluble or dispersed in water. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill:
Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources.

Section 7: Handling and Storage
Precautions:
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapour/spray. Wear suitable protective clothing In case of insufficient ventilation, wear suitable respiratory equipment If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes

Storage:
Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. A refrigerated room would be preferable for materials with a flash point lower than 37.8°C (100°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.
Odor: Suffocating.
Taste: Not available.
Molecular Weight: 58.08 g/mole
Color: Clear Colorless.
pH (1% soln/water): Not available.
Boiling Point: 49°C (120.2°F)
Melting Point: -81°C (-113.8°F)
Critical Temperature: Not available.
Specific Gravity: 0.8071 (Water = 1)
Vapor Pressure: 235 mm of Hg (@ 20°C)
Vapor Density: 2 (Air = 1)
Volutility: Not available.
Odor Threshold: 0.0000009 ppm
Water/Oil Dist. Coeff.: The product is more soluble in oil; log(oil/water) = 0.1
Ionicity (in Water): Not available.
Dispersion Properties: See solubility in water, methanol, diethyl ether, acetone.
Solubility:
Easily soluble in methanol, diethyl ether, acetone. Soluble in cold water.
**Section 10: Stability and Reactivity Data**

<table>
<thead>
<tr>
<th>Stability</th>
<th>The product is stable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instability Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Conditions of Instability</td>
<td>Not available.</td>
</tr>
<tr>
<td>Incompatibility with various substances</td>
<td>Not available.</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>Non-corrosive in presence of glass.</td>
</tr>
<tr>
<td>Special Remarks on Reactivity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Special Remarks on Corrosivity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Polymerization</td>
<td>No.</td>
</tr>
</tbody>
</table>

**Section 11: Toxicological Information**

<table>
<thead>
<tr>
<th>Routes of Entry</th>
<th>Eye contact. Inhalation. Ingestion.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to Animals:</td>
<td></td>
</tr>
<tr>
<td>WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 1200 mg/kg [Rat]. Acute dermal toxicity (LD50): 5040 mg/kg [Rabbit]. Acute toxicity of the vapor (LC50): 10900 ppm 4 hour(s) [Mouse].</td>
<td></td>
</tr>
<tr>
<td>Chronic Effects on Humans:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other Toxic Effects on Humans:</td>
<td></td>
</tr>
<tr>
<td>Very hazardous in case of ingestion, of inhalation. Hazardous in case of skin contact (irritant).</td>
<td></td>
</tr>
<tr>
<td>Special Remarks on Toxicity to Animals:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Special Remarks on Chronic Effects on Humans:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Special Remarks on other Toxic Effects on Humans:</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Section 12: Ecological Information**

| Ecotoxicity: | Not available. |
| BOD5 and COD: | Not available. |
| Products of Biodegradation: |
| Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. |
| Toxicity of the Products of Biodegradation: | The products of degradation are more toxic. |
| Special Remarks on the Products of Biodegradation: | Not available. |

**Section 13: Disposal Considerations**

| Waste Disposal: |

**Section 14: Transport Information**

| DOT Classification: | Class 3: Flammable liquid. |
| Identification:     | Propionaldehyde : UN1275 PG: II |
Special Provisions for Transport: Not available.

## Section 15: Other Regulatory Information

### Federal and State Regulations:
Pennsylvania RTK: Propionaldehyde Massachusetts RTK: Propionaldehyde TSCA 8(b) inventory: Propionaldehyde SARA 313 toxic chemical notification and release reporting: Propionaldehyde CERCLA: Hazardous substances.: Propionaldehyde

### Other Regulations:

### Other Classifications:

**WHMIS (Canada):**
CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). CLASS D-2B: Material causing other toxic effects (TOXIC).

**DSCL (EEC):**
R11- Highly flammable. R36/38- Irritating to eyes and skin.

**HMIS (U.S.A.):**
- Health Hazard: 2
- Fire Hazard: 3
- Reactivity: 0
- Personal Protection:

**National Fire Protection Association (U.S.A.):**
- Health: 2
- Flammability: 3
- Reactivity: 2
- Specific hazard:

### Protective Equipment:
Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

## Section 16: Other Information

### References:
Not available.

### Other Special Considerations:
Not available.

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06/09/2012 12:00 PM

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