3. Hazards Identification

2. Composition/Information on Ingredients

I. Product Identification

ACETONE
4. FIRST AID MEASURES

Potential Health Effects

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<table>
<thead>
<tr>
<th>Site of Exposure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin</td>
<td>Irritation due to dermal action on skin, causing redness, pain, drying, and cracking of the skin.</td>
</tr>
<tr>
<td>Eyes</td>
<td>Irritation due to dermal action on skin, causing redness, pain, drying, and cracking of the skin.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Irritation due to dermal action on skin, causing redness, pain, drying, and cracking of the skin.</td>
</tr>
</tbody>
</table>

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MAKE SURE TO WEAR CLEAN PROPER CLOTHES, CLASS B EXTINGUISHER.

Irritation to Skin, Eyes, and Respiratory Tract. Affects Central Nervous System.

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SAF-T-Data (Provided here for your convenience)
6. Accidental Release Measures

Pressured mode: breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Special Information: Provide personal protective clothing to stop leak and dispense vapor.

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus.

Special Information: May be used to keep the exposed containers cool, but spills in noncombustible mixtures may cause the containers to melt.

Dry chemical, alcohol-resistant foam or carbon dioxide. Water may be ineffective. Wearing spray protection equipment may cause eye injury.

Extinguishing Media: Inert gas flameproof rig and fume hood.

Explosion: Flammable limits in air:

LEL: 2.5% LEL
Upper limit: 8% UEL

Flammable lower limit: 46% (V)
Flammable upper limit: 87% (V)

Precaution: Firefighting Measures:

Lowest effective concentration. Get medical attention.

Immediately flush eyes with plenty of water for at least 15 minutes. Lift upper and lower eyelids.

Eye Contact: Thoroughly wash eyes before reuse.

Immediately flush mouth with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse.

Skin Contact: Never give anything by mouth to an unconscious person. Call a physician immediately.

INDUCE: If consciousness occurs, keep head below hips to prevent aspiration into lungs.
7. Handling and Storage

Protect against physical damage. Store in a cool, dry, well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred.

Avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion-proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

- OSHA Permissible Exposure Limit (PEL):
  - 1000 ppm (TWA)

- ACGIH Threshold Limit Value (TLV):
  - 500 ppm (TWA), 750 ppm (STEEL) A4

Ventilation System:

- A system of local exhaust ventilation is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions at their source, preventing dispersion of the contaminant into the general work area. Please refer to the ACGIH document, *Industrial Ventilation: A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (OSHA Approved):

- If the exposure limit is exceeded, and engineering controls are not feasible, a half-face negative-pressure, air-supplied respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece organic vapor respirator may be worn up to 30 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

- Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:

- Use chemical safety goggles and/or a full face shield where splashing is possible.
9. Physical and Chemical Properties

Appearance: Clear, colorless, volatile liquid.
Odor: Fragrant, mint-like
Solubility: Miscible in all proportions in water.

Specific Gravity: 0.79 @ 20°C/4°C

PH: 0.79 % Volatiles by volume @ 21°C (70°F):
Boiling Point: 56.5°C (133°F) @ 760 mm Hg
Melting Point: -95°C (-139°F)
Vapor Density (Air=1): 2.0
Vapor Pressure (mm Hg): 400 @ 39.3°C (103°F)
Evaporation Rate (Baek): ca. 7.7

10. Stability and Reactivity

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization: Will not occur.

Incompatibilities: Concentrated nitric, sulfuric acid mixtures, oxidizing materials, chloroform, alcohols, chlorine compounds, acids, potassium t-haluride.

Conditions to Avoid: Heat, flames, ignition sources and incompatibles.

11. Toxicological Information

Oral (rat): LD50: 500 mg/kg; Inhalation rat LC50: 50,100 mg/m3; Irritation eye, rabbit,
14. Transport Information

13. Disposal Considerations

Environmental Toxicology:
This material is not expected to be toxic to aquatic life. LC50/96-hour values for fish expected to be readily removed from the environment by volatilization.

Environmental Fate:
This material is expected to be readily biodegradable when released into the environment. Biodegradation studies show that this material is expected to be readily biodegradable when released into the environment. When released into the soil, this material is expected to be a slightly mobile contaminant. When released into water, this material is expected to be a slightly mobile contaminant. When released into groundwater, this material is expected to be readily biodegradable.

12. Ecological Information

None

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16. Other Information

Reclameations (CPR) and the MSDS contains all of the information required by the CPR.

WHMIS:
Potion Schedule: None allocated
Australia Hazchem Code: ZVE

15. Regulatory Information

Information Reported for Product/Size: 1881

Packaging Group II
UN/NAC: UN1090
Hazard Class: 3
Proper Shipping Name: ACETONE
NFPA Ratings: Health: 1 Flammability: 3 Reactivity: 0

Label Precautions:
- Keep container closed.
- Use only with adequate ventilation.
- Avoid breathing vapor.
- Avoid contact with eyes, skin and clothing.
- Wash thoroughly after handling.

Label First Aid:
- In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention.

Warning:
DANGER EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY IRRITATE SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM.

Aspiration hazard. If swallowed, vomiting may occur spontaneously. But DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention.

Product Use:
Laboratory Reagent.

Revision Information:
No Changes.

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