Safety Data Sheet (SDS)



| Product Identifier | |
|------------------------------------|--------------------------------|
| Product Name: | Liquid-Ice® HPX |
| Other Means of Identification: | |
| SDS No.: | HPX-002 |
| Recommended use of the che | mical and restrictions on use: |
| Decommonded uses | |
| Recommended use: | Metalworking compound |
| Details of the supplier of the Saf | |
| | ety Data Sheet |

1. IDENTIFICATION

 Company Telephone Number:
 +1 - (704) 882-3505

 Company Fax Number:
 +1 - (704) 882-8665

Emergency Telephone Number (24 hr.): Chemtrec (800) 424-9300 (North America), +1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Classification:

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29CFR 1910.1200). However, the Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product, This SDS should be retained and available for employees and other users of this product.

Medical Conditions Aggravated by Exposure:

Pre-existing skin and eye disorders may be aggravated by exposure to this product

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients:

| Chemical Name | CAS No. | Weight % |
|-----------------|----------|-------------|
| Triethanolamine | 102-71—6 | 0.1 – 10.0% |

Non-Hazardous Ingredients:

| Chemical Name | CAS No. | Weight % |
|-------------------|-----------|----------|
| Proprietary Blend | N/A | 10 – 65% |
| Water | 7732-18-5 | 25 – 65% |

If "Chemical Name/CAS No." is "proprietary" or Weight % is listed as a range, the specific chemical identity or percentage of composition has been withheld as a trade secret

| 4. FIRST AID MEASURES | | |
|-----------------------|--|--|
| | | |
| Eye Contact: | Immediately flush eyes with running water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if redness or irritation occurs. | |
| Skin Contact: | Remove contaminated clothing. Wash affected area thoroughly with soap and water for 15 minutes. Get medical attention if irritation or other ill effects develop or persist. | |
| Inhalation: | Remove victim to fresh air. Give artificial respiration if breathing has stopped. Get immediate medical attention. Do not give fluids is victim is unconscious. | |
| Ingestion: | If victim is conscious, give large amounts of water or milk. Get medical attention. Never give anything by mouth to an unconscious person. | |
| Note to Physician: | Treat according to person's condition and specifics of exposure. | |

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Water spray jet, foam, carbon dioxide, dry powder

Unsuitable Extinguishing Media: Not determined

Specific Hazards Arising from the Chemical: None known

Protective Equipment and Precautions for Fire Fighters:

Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

Hazardous Combustion Products:

Oxides of Nitrogen (NOx) and Carbon

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

| Personal Precautions: Other Information: | Use personal protection recommended in Section 8 FOR ALL TRANSPORTATION ACCIDENTS CALL CHEMTREC AT (800) 424-9300 OR +1-703-527-3887 FOR INTERNATIONAL COLLECT CALLS | |
|---|---|--|
| For Emergency Responders: | Keep unnecessary and unprotected personnel from entering. Use personal protection recommended in Section 8 | |
| Environmental Precautions: | See Section 12 for additional Ecological information. See Section 13, Disposal Considerations for additional information | |
| Methods and Materials for cleaning up: | | |
| Methods for Containment: | Prevent further leakage or spillage if safe to do so | |
| Methods for Clean-up: | Small Spill: Dike spilled material if possible. Collect spilled material with an inert absorbent such as sand or vermiculite. Shovel waste material into properly labeled closed container. Flush area with water to remove residue. Do not discharge into storm drains or the aquatic environment. Large Spill: Same basic procedure as for small spill. Pumps or vacuum may be needed to remove spilled material. | |

7. HANDLING AND STORAGE

Precautions for Safe Handling:

| Advice on Safe Handling: | Handle in accordance with good industrial hygiene and safety practices. Use personal protection recommended in Section 8. Avoid skin and eye and clothing contact. |
|-----------------------------------|--|
| Conditions for safe storage, incl | uding any incompatibilities |
| Storage Conditions: | Store in original containers in a cool, dry and well ventilated space. Keep containers tightly closed when not in use. Store at 5-40 °C (40 – 105 °F) |
| Incompatible Materials: | Strong oxidizers, highly alkaline products, nitrites, nitrosating agents. |

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

| Exposure Guidelines: | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies | | |
|--|---|--|--|
| Appropriate Engineering Controls | | | |
| Engineering Controls: | Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers | | |
| Individual Protection measures, such as personal protective equipment: | | | |
| Eye/Face Protection: Skin/Body Protection: | Safety glasses or chemical worker's goggles. Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Protective clothing to minimize skin contact should be worn, as well as chemically resistant safety shoes. Butyl rubber, PVC or Neoprene protective gloves are recommended. | | |

Respiratory Protection:

If airborne concentrations pose a health hazard, become irritating or exceed recommended limits, use a NIOSH approved respirator in accordance with OSHA respiratory protection requirements under 29 CFR 1910.134 General Hygiene Consideration: Handle in accordance with good industrial hygiene and safety practice

PHYSICAL AND CHEMICAL PROPERTIES 9.

Information on basic physical and chemical properties

| Physical State: | Liquid at 77° F (25° C) |
|-------------------------------|--|
| Color: | Light Amber |
| Odor: | Mild |
| Odor threshold: | Not determined |
| Specific Gravity @ 20°C: | 1.04 |
| Density: | 8.7 lb./gal. |
| Viscosity: | 25 cPs at 25°C |
| Freezing Point: | 0°C (32°F) |
| Boiling Point: | > 100°C (212°F) |
| Flash Point: | > 220° C (> 428° F) |
| Autoignition Temperature: | None |
| Decomposition temperature: | > 220° C (> 428° F) |
| Evaporation Rate | Not determined |
| Flammability (solid, gas): | Liquid (not applicable) |
| Upper Flammability Limit: | Not applicable – product will not ignite |
| Lower Flammability Limit: | Not applicable – product will not ignite |
| Vapor Pressure @ 20°C: | < 0.01 mm Hg |
| Vapor Density: | Not determined |
| Solubility in Water: | Soluble |
| Solubility in other solvents: | Not determined |
| pH: | 8.8 (10% in water @ 25°C) |
| Kinematic Viscosity: | Not determined |
| Dynamic Viscosity: | Not determined |
| Explosive Properties: | None known |
| Oxidizing Properties: | Not determined |
| VOC Content: | 10 g/L (ASTM E-1868/10SCAQMD Rule 1144) |

Note: The above are typical properties and cannot be construed as specifications.

10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions

Chemical Stability: Stable under recommended storage conditions

Possibility of Hazardous Reactions:

None under normal processing

Hazardous Polymerization: Hazardous polymerization will not occur.

Conditions to Avoid:

Do not use highly alkaline products or nitrites or nitrosating agents with this product.

Incompatible materials:

Strong oxidizers

Hazardous Decomposition Products

Carbon Oxides, Nitrogen Oxides (NOx)

11. TOXICOLOGICAL INFORMATION

Acute Toxicity (similar material)

Not Determined

Potential Acute Health Effects

| | Eye irritation Skin irritation Respriatory irritation Inhalation irritation | Slightly. Slightly. Slightly. Slightly. |
|------------------------|--|--|
| Sensitization Effects: | Not determined. | |
| Chronic Effects: | No known significant effect | cts or critical hazards. |
| Mutagenicity Effects: | No known significant effect | cts or critical hazards. |
| Teratogenicity: | No known significant effect | cts or critical hazards. |
| Fertility Effects: | No known significant effect | cts or critical hazards. |
| Development Effects: | No known significant effect | cts or critical hazards. |
| Carcinogenicity: | No known significant effect | cts or critical hazards. |
| Target Organs: | None known | |

Component Information

| Chemical Name | Oral LD60 | Dermal LD60 | Inhalation LD60 |
|---------------|-----------------|-------------|-----------------|
| Water | >90 mL/Kg (rat) | | |
| 7732-18-5 | | | |

Information on physical, chemical and toxicological effects

Symptoms See Section 4 of this SDS for symptoms

Delayed and immediate effects as well as chronic effects from short and long term exposure

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment

Persistence/Degradability:

No information available

Bioaccumulation:

Not determined

Mobility: Not considered mobile

Other Adverse Effects: Not determined

Additional Information:

AOX absent PBT and vPvB: Not applicable

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

| Disposal of Waste: control regulations. | Waste must be disposed of in accordance with federal, state and local environmental |
|---|---|
| Contaminated Packaging regulations | Disposal should be in accordance with applicable federal, regional and local laws and |

14. TRANSPORT INFORMATION

<u>Note</u>: See current shipping paper for most up to date shipping information, including exemptions and special circumstances

DOTNot regulatedOcean Shipment (IMDG)Not regulatedAir Shipment (IATA)Not regulated

15. REGULATORY INFORMATION

International Inventories

| TSCA: | Listed |
|---------|--------|
| NDSL: | Listed |
| EINECS: | Listed |

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) 40 CFR 302, or the Superfund Amendments and Reauthorization Act (SARA) 40 CFR 355

Section 311/312 Hazard Categories:

| Acute Health Hazard: | Yes |
|------------------------|-----|
| Chronic Health Hazard: | No |
| Fire Hazard: | No |
| Pressure Hazard: | No |
| Reactive Hazard: | No |

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1966 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act):

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and

40 CFR 122.42)

US State Regulations

California Proposition 65

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm: Triethanolamine

US State Right to Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

16. OTHER INFORMATION

| NFPA | Health Hazards | Flammability | Reactivity | Special Hazards |
|------|----------------|--------------|------------|---------------------|
| | 1 | 0 | 0 | Not determined |
| HMIS | Health Hazards | Flammability | Reactivity | Personal Protection |
| | 1 | 0 | 0 | A |

| Issue Date: | April 27, 2015 |
|-----------------------|--|
| Revision Date: | May 31, 2019 |
| Revision Note: | Changes to sections 2, 11, 12, 13 and 15 |

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End of Safety Data Sheet