DESCRIPTION: MEA Triazine 70%

1. Chemical Product and Company Identification

DESCRIPTION: MEA Triazine 70%
PRODUCT CODE: 360802
PRODUCT TYPE: Formaldehyde Amine Compd
APPLICATION: Proprietary Product

Manufacturer/Supplier Information

MSDS prepared by: Hexion Specialty Chemicals, Inc.
155 West A Street, Bldg. A-1
Springfield, Oregon 97477

For Emergency Medical Assistance
Call Health & Safety Information Services
1-866-303-6949

For additional health and safety or regulatory information, call (614)225-4778.

2. Hazards Identification

2.1 Emergency Overview

Appearance: Clear liquid
Odor: Slight amine

CAUTION!
Will burn.
May be harmful if inhaled. May cause irritation of nose, throat and lungs.
Causes eye irritation.
May be harmful if swallowed.
Causes skin irritation.
May cause allergic skin reaction.

NORTH AMERICAN EMERGENCY RESPONSE GUIDE, 2000, NO: 171

HMIS Rating

HEALTH = 2 (moderate)
FLAMMABILITY = 1 (slight)
REACTIVITY = 0 (minimal)
CHRONIC = *

HMIS® ratings involve data interpretations that may vary from company to company. They are intended only for the rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

2.2 Potential Health Effects
Immediate Hazards

**INGESTION:** May be harmful if swallowed.

**INHALATION:** May be harmful if inhaled. Liquid or vapor may cause irritation of nose, throat and lungs.

**SKIN:** Causes irritation.

**EYES:** Causes irritation.

Delayed Hazards

**67-56-1** Methanol
Developmental effects in animals were observed at doses, which did not produce maternal toxicity by inhalation. Published data indicates a LOAEL of 5000 PPM and a NOAEL of 1000 PPM.
-- See Footnote at end of section

**4719-04-4** 1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol
May cause allergic skin reaction.
-- See Footnote at end of section

**50-00-0** Formaldehyde
May cause cancer. OSHA regulates formaldehyde as a potential human carcinogen. See the OSHA Formaldehyde Workplace Standard at 29CFR 1910.1048. Rats chronically exposed to 14 ppm formaldehyde contracted nasal cancer. The National Toxicology Program (NTP) has listed formaldehyde as a probable human carcinogen. The International Agency for Research on Cancer (IARC) has concluded formaldehyde is carcinogenic to humans.

Safe handling and use instructions are provided in this MSDS and in the OSHA Formaldehyde Workplace Standard at 29CFR1910.1048. OSHA has identified 0.5 ppm as the "Action Level". Please review and understand the guidance contained in this MSDS and refer to the OSHA Formaldehyde Standard for regulatory requirements that may be applicable to your operation and use.

For further information and a review of various studies, go to www.osha.gov/SLTC/formaldehyde, www.iarc.fr and other authoritative websites.

May cause allergic skin reaction. Some reports suggest that formaldehyde may cause respiratory sensitization, such as asthma, and that preexisting respiratory and skin disorders may be aggravated by exposure.

Note: This product contains less than 0.1% free formaldehyde. Residual formaldehyde gas may be released from this product. The amount and level will depend on local conditions of use. Formaldehyde gas is irritating to the eyes and upper respiratory tract and may aggravate existing respiratory conditions or allergies. OSHA has listed formaldehyde as a potential human carcinogen. See the OSHA formaldehyde standard 29 CFR 1910.1048 for further details. The International Agency for Research on Cancer (IARC) has concluded formaldehyde is carcinogenic to humans.

Footnote: As of the date of issuance of this document, this material has not been listed by NTP, classified by IARC nor regulated by OSHA as a carcinogen.

3. Composition, Information on Ingredients

The ingredients listed below have been associated with one or more immediate and/or delayed(*) health hazards. Risk of damage and effects depends upon duration and level of exposure. BEFORE USING, HANDLING, OR EXPOSURE TO THESE INGREDIENTS, READ AND UNDERSTAND THE MSDS.

% by weight
4. **First Aid Measures**

**INGESTION:** If accidentally swallowed, dilute by drinking large quantities of water. If the individual is drowsy or unconscious, do not give anything by mouth. Immediately contact poison control center or hospital emergency room for advice on whether to induce vomiting or for any other additional treatment directions.

**INHALATION:** If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Call a physician.

**SKIN:** Flush with plenty of water. Remove contaminated clothing. Call a physician if irritation persists.

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held apart during irrigation to ensure water contact with entire surface of eyes and lids. Call a physician.

5. **Fire Fighting Measures**

Suitable Extinguishing Media: In case of fire, use water spray, dry chemical, "alcohol" foam or CO2. Use water to keep fire-exposed containers cool.

Will burn.

6. **Accidental Release Measures**

Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. For large spills, use water spray to disperse vapors and flush spill area. Prevent runoff from entering waterways or sewers. Use appropriate Personal Protective Equipment (PPE).

7. **Handling and Storage**

7.1 **Handling**

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of the material from eyes, skin and clothing. Wash thoroughly after handling. Always use appropriate Personal Protective Equipment (PPE).

**INHALATION:** Avoid breathing vapor. Use with adequate ventilation.

**SKIN:** Avoid contact with skin and clothing.

**EYES:** Avoid contact with eyes.
7.2 Storage
Storage temperature should be controlled to avoid precipitation or vaporization. See technical bulletin for recommended storage temperatures. Remove plug slowly to relieve pressure.

8. Exposure Controls/Personal Protection

8.1 Exposure Guidelines

<table>
<thead>
<tr>
<th>67-56-1</th>
<th>Methanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH TLV</td>
<td>8-hr TWA 200 ppm 262 mg/m3 Skin</td>
</tr>
<tr>
<td>STEL (15 min)</td>
<td>250 ppm 328 mg/m3</td>
</tr>
<tr>
<td>OSHA PEL</td>
<td>8-hr TWA 200 ppm 260 mg/m3</td>
</tr>
<tr>
<td>Remanded</td>
<td>250 ppm 325 mg/m3</td>
</tr>
<tr>
<td>STEL</td>
<td></td>
</tr>
</tbody>
</table>

| 4719-04-4 | 1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol |
| ACGIH TLV | None established |
| OSHA PEL | None established |

<table>
<thead>
<tr>
<th>50-00-0</th>
<th>Formaldehyde</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH TLV</td>
<td>Ceiling 0.3 ppm 0.37 mg/m3 A2 - Suspected Human Carcinogen; SEN</td>
</tr>
<tr>
<td>OSHA PEL</td>
<td>8-hr TWA 0.75 ppm 0.9 mg/m3</td>
</tr>
<tr>
<td>STEL (15 min)</td>
<td>2 ppm 2.5 mg/m3</td>
</tr>
</tbody>
</table>

8.2 Exposure Controls
ENGINEERING CONTROLS: The following exposure control techniques may be used to effectively minimize employee exposure: local exhaust ventilation, enclosed system design, process isolation and remote control in combination with appropriate use of personal protective equipment and prudent work practices. These techniques may not necessarily address all issues pertaining to your operations. We, therefore, recommend that you consult with experts of your choice to determine whether or not your programs are adequate.

If airborne contaminants are generated when the material is heated or handled, sufficient ventilation in volume and air flow patterns should be provided to keep air contaminant concentration levels below acceptable criteria.

8.3 Personal Protection
Where air contaminants can exceed acceptable criteria, use NIOSH (42 CFR Part 84) approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminants in air in accordance with OSHA laws and regulations or other applicable standards or guidelines, including ANSI standards regarding respiratory protection. Use goggles if contact is likely. Wear impervious gloves as required to prevent skin contact.

9. Physical and Chemical Properties

- **Appearance**: Clear liquid
- **Odor**: Slight amine
- **Odor threshold**: Not available
- **pH**: 9.9 - 10.9
- **Freezing point**: Not available
- **Boiling point, 760 mm Hg**: Not available
10. Stability and Reactivity

Chemical Stability

Normally stable as defined in NFPA 704-12(4-3.1).

Incompatible Materials

None known to company.

Hazardous Decomposition Products

Formaldehyde and oxides of carbon and nitrogen.

Possibility of Hazardous Reactions

Hazardous polymerization is not expected to occur.

11. Toxicological Information

See Section 3 Hazards Identification information.

67-56-1  Methanol
LC50: rat=64,000 mg/l/4 h (Sax)
LD50: Oral-rat= 5,628 mg/kg (Sax);  Skin-rabbit= 20,000 mg/kg (Sax)
4719-04-4 1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol
LC50: Not available
LD50: Oral-rat= 488 mg/kg (vendor);  Skin-rabbit= Greater than 2,000 mg/kg (Sax)
50-00-0  Formaldehyde
LC50: rat=0.59 mg/l (Sax)
LD50: Oral-rat= 800 mg/kg (Merck);  Skin-rabbit= 270 mg/kg (Sax)

12. Ecological Information

Not determined

13. Disposal Considerations

Recover free liquid. Absorb residue and dispose of according to local, state/provincial, and federal requirements.

14. Transport Information
14.1 U.S. Department of Transportation (DOT)

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

**Proper shipping name**  ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Formaldehyde)

**UN/NA number**  3082

**Class**  9

**Packing group**  III

**Label**  9

**RQ Ingredients**  Formaldehyde

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14.2 Canadian Transportation of Dangerous Goods (TDG)

Regulation:  Non-regulated

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14.3 Other Regulations

- **ADR/RID**
  Regulation:  Non-regulated

- **IMO/IMDG**
  **Proper shipping name**  ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

  **UN Number**  3082

  **Class**  Class 9

  **Packing group**  III

  **Label**  9

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15. Regulatory Information (Selected Regulations)

15.1 U.S. Federal Regulations


This material is a "health hazard" and/or a "physical hazard" as determined when reviewed according to the requirements of the Occupational Safety and Health Administration 29 CFR Part 1910.1200 "Hazard Communication" Standard.

**SARA Title III: Section 311/312**

Immediate health hazard

Delayed health hazard

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**SARA Title III: Section 313 and 40 CFR Part 372**

This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.

**Formaldehyde** 50-00-0  0.50%
TSCA Section 8(b) Inventory

All reportable chemical substances are listed on the TSCA Inventory. We rely on certifications of compliance from our suppliers for chemical substances not manufactured by us.

15.2 Canadian Regulations

Workplace Hazardous Materials Information System (WHMIS)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR) and the MSDS contains all the information required by the CPR.

Class D1B
Class D2A
Class D2B

Canadian Environmental Protection Act (CEPA)

All reportable chemical substances are listed on the Domestic Substances List (DSL) or otherwise comply with CEPA new substance notification requirements.

National Pollutant Release Inventory (NPRI)

This product contains the following chemical(s) subject to the reporting requirements of the Canadian Environmental Protection Act (CEPA) subsection 16(1), National Pollutant Release Inventory.

None required.

16. Other Information

User's Responsibility

The OSHA Hazard Communication Standard 29CFR 1910.1200 and the Workplace Hazardous Materials Information System (WHMIS) require that the information contained on these sheets be made available to your workers. Educate and train your workers regarding OSHA and WHMIS precautions. Instruct your workers to handle this product properly. Consult with appropriate experts to guard against hazards associated with use of this product and its ingredients.

Disclaimer

The information provided herein was believed by Hexion Specialty Chemicals ("Hexion") to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied by Hexion are subject to Hexion's terms and conditions of sale. Hexion makes no warranty, express or implied, concerning the product or the merchantability or fitness thereof for any purpose or concerning the accuracy of any information provided by Hexion, except that the product shall conform to Hexion's specifications. Nothing contained herein constitutes an offer for the sale of any product.

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