MSDS061

Anti-Fog Lens Cleaner

MATERIAL SAFETY DATA SHEET

Chemical Product and Company Identification

LABEL IDENTIFIER: Anti-Fog Lens Cleaner
PRODUCT IDENTIFIER: P/N 13016 Fogprüf™ Solution, 4 oz. Spray Bottle
COMPANY IDENTIFICATION: MINE SAFETY APPLIANCES COMPANY
P.O. Box 439
Pittsburgh, PA 15230
CUSTOMER SERVICE: 1-800-MSA-2222 (8:30 a.m. – 5:00 p.m., USA local time)
EMERGENCY: 1-800-255-3924 (CHEM-TEL, INC.)

Vendor Information

A Material Safety Data Sheet as furnished by Hilco for MSA Anti-Fog Lens Cleaner is attached (8 Pages).

Hilco MSDS REVISION DATE: 3/4/2009

Other Information

WARNING: This is a hazardous chemical product. By following the directions and warnings provided with this product, the hazards associated with the use of this product can be greatly reduced but never entirely eliminated. Mine Safety Appliances Company makes no warranties, expressed or implied, with respect to this product and EXPRESSLY DISCLAIMS THE WARRANTY OF MERCHANTABILITY AND ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. Users assume all risks in handling, using or storing this product.
1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: MSA Lens Cleaning Liquid with Alcohol
Product Number(s): 35-MSA
Recommended Use: Lens cleaner

Supplier information:
Hilco
33 West Bacon Street, Plainville, Massachusetts, 02762 USA
Phone: 1-508-699-4406
Fax: 1-508-699-4579
Contact:
Emergency Phone: Call INFOTRAK - 1-800-535-5053

2. HAZARDS IDENTIFICATION

Potential Health Effects
Principal Routes of Exposure
Inhalation. Skin contact. Eye Contact.

Acute Toxicity
Eyes
May cause irritation.
Skin
May cause irritation.
Inhalation
Avoid breathing vapors or mists. May cause irritation of respiratory tract. May cause drowsiness or dizziness.
Ingestion
May be harmful if swallowed.

Chronic Effects
No known effects based on information supplied.

Aggravated Medical Conditions

Interactions w/ Other Chemicals
Use of alcoholic beverages may enhance toxic effects.

Environmental Hazards
See section 12
3. INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>773-18-5</td>
<td>60-85</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>67-63-0</td>
<td>10-30</td>
</tr>
<tr>
<td>Supplier Trade Secret</td>
<td>Proprietary</td>
<td>5-10</td>
</tr>
<tr>
<td>Supplier Trade Secret</td>
<td>Proprietary</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>144-55-8</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Anti-Fog</td>
<td>56-81-5</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Anti-Stat</td>
<td>68391-01-5</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

**Eye Contact**
Rinse immediately with plenty of clean water, also under eyelids, for at least 15 minutes. Keep eyes wide open while rinsing. If symptoms persist, call a physician.

**Skin Contact**
Wash with soap and water. If irritation persists, or allergic reaction occurs, call a physician.

**Inhalation**
Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

**Ingestion**
DO NOT induce vomiting. Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician immediately.

**Notes to Physicians**
Treat symptomatically.

5. FIRE FIGHTING MEASURES

**Flammable Properties**
Combustible material.

**Flash Point**
No information available.

**Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Uniform Fire Code**
- Combustible Liquid II-B
- Other health hazard: Target Organ Toxin -- Liquid

**Hazardous Byproducts of Combustion**
Carbon oxides

**Explosion Data**
- Sensitivity to Mechanical Impact: Not sensitive
- Sensitivity to Static Discharge: Yes

**Protective Equipment**
Wear self contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent), and full protective gear.

**Special Precautions**

6. ACCIDENTAL RELEASE & SPILL MEASURES

**Personal Precautions**
Ensure adequate ventilation. Avoid contact with skin and eyes. Remove all sources of ignition.

**Containment Methods**
Prevent further leakage or spillage if safe to do so.
7. HANDLING AND STORAGE

Handling
Handle in accordance with good industrial hygiene and safety practices. Avoid contact with skin, eyes and clothing. Keep out of reach of children. Keep away from open flame and other sources of ignition.

Storage
Keep container tightly closed in a cool dry place. Keep in properly labeled containers. Keep away from open flame and other sources of ignition.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>TWA: 200 ppm STEL TWA: 400 ppm</td>
<td>TWA: 400 ppm TWA: 980 mg/m³ (TWA: 400 ppm TWA: 980 mg/m³ (TWA: 980 mg/m³ (TWA: 200 ppm)</td>
<td>IDLH: 2000 ppm TWA: 980 mg/m³ TWA: 980 mg/m³ (TWA: 200 ppm)</td>
</tr>
<tr>
<td>Supplier Trade Secret</td>
<td>TWA: 20 ppm</td>
<td>TWA: 50 ppm TWA: 240 mg/m³ (TWA: 25 ppm TWA: 120 mg/m³ (TWA: 50 ppm)</td>
<td>IDLH: 700 ppm</td>
</tr>
</tbody>
</table>

Engineering Measures
Showers. Eyewash Stations. Ventilation Systems

Personal Protective Equipment
- **Eye & Face Protection**
  - Tight fitting safety goggles
- **Skin & Body Protection**
  - Lightweight protective clothing. Protective gloves.
- **Respiratory Protection**
  - If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures
When using, do not eat, drink or smoke. Remove and wash contaminated clothing before reuse. Provide regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: Clear, pale blue liquid
- Odor: Mild alcohol scent
- Odor Threshold: No information available
- Physical State: Liquid
- pH: 7
- Flash Point: No information available
- Auto-ignition Temperature: No information available
- Decomposition Temperature: No information available
- Boiling Point: No information available
- Melting Point: No information available
- Flammability Limits in Air: No information available
- Explosion Limits: No information available
- Water Solubility: Soluble in water
MATERIAL SAFETY DATA SHEET

PRODUCT: MSA Lens Cleaning Liquid with Alcohol
Issue Date: 4 March 2009  Revision Date:  

<table>
<thead>
<tr>
<th>Property</th>
<th>Information Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solubility</td>
<td>no information available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>no information available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>no information available</td>
</tr>
<tr>
<td>Vapor Density (at 20°C)</td>
<td>no information available</td>
</tr>
<tr>
<td>Specific Gravity (at 0°C)</td>
<td>no information available</td>
</tr>
<tr>
<td>VOC Content</td>
<td>no information available</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Stability
Stable under recommended storage conditions

Incompatible Products
Strong oxidizing agents, Acids, Chlorinated compounds

Conditions to Avoid
Heat, flames, sparks.

Hazardous Byproducts of Decomposition
Carbon Oxides

Hazardous Polymerization
Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity
Product Information
Product does not present an acute toxicity hazard based on known or supplied information.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LD50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>90 ml/kg (Rat)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>4396 mg/kg (Rat)</td>
<td>12800 mg/kg (Rat)</td>
<td>72.6 mg/L (Rat) 4h</td>
</tr>
<tr>
<td>Supplier Trade Secret</td>
<td>470 mg/kg (Rat)</td>
<td>220 mg/kg (Rat)</td>
<td>2.21 mg/L (Rat) 4h</td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>4220 mg/kg (Rat)</td>
<td>2270 mg/kg (Rabbit)</td>
<td>450 ppm (rat) 4h</td>
</tr>
</tbody>
</table>

Chronic Toxicity

Carcinogenicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier Trade Secret</td>
<td>A3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ACGIH: American Conference of Governmental Industrial Hygienists
A3: Animal Carcinogen

Target Organ Effects
12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>EC50 &gt; 1000mg/L 96h</td>
<td>LC50 = 81200 mg/L</td>
<td>EC50 &gt; 35390 mg/L 5 min.</td>
<td>EC50 = 13299 mg/L 48h</td>
</tr>
<tr>
<td></td>
<td>EC50 &gt; 1000mg/L 96h</td>
<td>LC50 = 94000 mg/L</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pimephales promelas 96h</td>
<td>LC50 = 9640 mg/L</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pimephales promelas 96h</td>
<td>LC50 = 13299 mg/L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplier Trade Secret</td>
<td>LC50 = 1490 mg/L 96h</td>
<td>LC50 = 94900 mg/L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>EC50 &gt; 650mg/L 120h</td>
<td>LC50 = 2850-9000 mg/L</td>
<td></td>
<td>EC50 = 2350 mg/L 48h</td>
</tr>
<tr>
<td></td>
<td>Lepomis macrochirus 96h</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. WASTE DISPOSAL

Waste Disposal Methods

This material as supplied is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Materials

Dispose of in accordance with local regulations.

This product contains one or more substances that are listed with the State of California as a hazardous waste:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>Toxic. Ignitable</td>
</tr>
</tbody>
</table>

14. TRANSPORTATION

<table>
<thead>
<tr>
<th>DOT</th>
<th>not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDG</td>
<td>not regulated</td>
</tr>
<tr>
<td>MEX</td>
<td>not regulated</td>
</tr>
<tr>
<td>ICAO</td>
<td>not regulated</td>
</tr>
<tr>
<td>IATA</td>
<td>not regulated</td>
</tr>
<tr>
<td>IMDG/IMO</td>
<td>not regulated</td>
</tr>
</tbody>
</table>
MATERIAL SAFETY DATA SHEET

PRODUCT: MSA Lens Cleaning Liquid with Alcohol
Issue Date: 4 March 2009

RID .................... not regulated
ADR .................... not regulated
ADN .................... not regulated

15. REGULATORY INFORMATION

International Inventories

TSC .................... Complies
DSL .................... Does not comply
EINECS/ELINCS Does not comply
ENCS .................... Does not comply
IECSC .................... Does not comply
KECL .................... Does not comply
PICCS .................... Does not comply
AICS .................... Does not comply

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, part 372.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>% by Weight</th>
<th>SARA 313 - Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>67-63-0</td>
<td>10 - 30</td>
<td>1.0</td>
</tr>
<tr>
<td>Supplier Trade Secret</td>
<td>Proprietary</td>
<td>5-10</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 313 / 312 Hazard Catagories

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard No
Sudden Pressure Release Hazard No
Reactive Hazard No

Clean Water Act
This Product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Clean Air Act, Sec. 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product contains the following substances which are listed hazardous air pollutants (HAPs) under Sec. 112 of the Clean Air Act.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>%by Weight</th>
<th>HAPs Data</th>
<th>VOC Chemicals</th>
<th>Class 1 Ozone Depleters</th>
<th>Class 2 Ozone Depleters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier Trade Secret</td>
<td>Proprietary</td>
<td>5-10</td>
<td>HAPs Data</td>
<td>Group 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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) (43 CFR 355). There may be specific reporting requirements at the local, regional or state level pertaining to releases of this material.

U.S. State Regulations
MATERIAL SAFETY DATA SHEET

PRODUCT: MSA Lens Cleaning Liquid with Alcohol

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>MA</th>
<th>NJ</th>
<th>PA</th>
<th>IL</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Supplier Trade Secret</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

International Regulations

Mexico – Grade
Moderate risk, Grade 2

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Carcinogen Status</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td></td>
<td>Mexico: TWA=25ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: TWA=120 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: STEL=360 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: STEL=75ppm</td>
</tr>
<tr>
<td>Supplier Trade Secret</td>
<td></td>
<td>Mexico: TWA=400ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: TWA=980 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: STEL=1225 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: STEL=5000ppm</td>
</tr>
</tbody>
</table>

Canada

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

WHMIS Hazard Class
Non-controlled
D1B Toxic materials

Chemical Name | National Pollutant Release Inventory
---|---
Isopropyl Alcohol | X
Supplier Trade Secret | X

16. OTHER INFORMATION

Date of Issue: 4 March 2009
Revision date
Revision Note
HAZARDS AND EMERGENCY OVERVIEW

May be harmful if swallowed, inhaled or absorbed through the skin.
Irritating to eyes.
May cause central nervous system depression.

Disclaimer
The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, release and disposal, and is not to be considered as a warranty or quality specification. The information related only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text of this MSDS.

* * * END OF MATERIAL SAFETY DATA SHEET * * *