1. IDENTIFICATION

Product Identifier
Product Name: Radnor® 4Oz. Pump Bottle Alcohol-Free Lens Cleaner For Polycarbonate, Plastic And Glass Eyewear Lenses

Other means of identification
SDS #
Product Numbers: RAD64051475

Recommended use of the chemical and restrictions on use
Recommended Use: Eyeglass lens cleaner.

Details of the supplier of the safety data sheet
Supplier Address: Hilsinger Company
33 West Bacon Street
Plainville, MA 02762

Emergency Telephone Number
Company Phone Number: 1-508-699-4406
Emergency Telephone (24 hr): INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance: Clear, pale pink or pale blue liquid
Physical State: Liquid
Odor: Mild citrus

Classification
The information below is for the liquid in industrial quantities when used in an industrial setting. The solution as packed in a consumer quantity is considered a consumer good and when used as intended is unlikely to present a hazard

Hazards Not Otherwise Classified (HNOC)
Causes mild skin irritation

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol Monobutyl Ether</td>
<td>111-76-2</td>
<td>5-15</td>
</tr>
</tbody>
</table>

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

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin Contact: Wash with soap and water.
Inhalation
Remove to fresh air.

Ingestion
Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects

Symptoms
Causes mild skin irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

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

Unsuitable Extinguishing Media
Not determined.

Specific Hazards Arising from the Chemical
Not determined.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions
Avoid contact with skin, eyes or clothing.

Environmental Precautions
See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment
Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Keep out of the reach of children.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place.
Incompatible Materials
None known based on information supplied.

8. EXPOSURE CONTROLS/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>Ethylene Glycol Monobutyl Ether</td>
<td>TWA: 20 ppm</td>
<td>TWA: 50 ppm</td>
<td>IDLH: 700 ppm</td>
</tr>
<tr>
<td>111-76-2</td>
<td></td>
<td>TWA: 24 ppm</td>
<td>TWA: 5 ppm</td>
</tr>
<tr>
<td></td>
<td>(vacated) TWA: 25 ppm</td>
<td>(vacated) 25 ppm</td>
<td>TWA: 24 mg/m³</td>
</tr>
<tr>
<td></td>
<td>(vacated) S*</td>
<td>(vacated) S*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(vacated) S*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ILDH: 700 ppm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls
Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Avoid contact with eyes.

Skin and Body Protection
Wear suitable protective clothing.

Respiratory Protection
Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear, pale pink or pale blue liquid</td>
<td>Odor Mild citrus</td>
</tr>
<tr>
<td>Color</td>
<td>Clear, pale pink or pale blue</td>
<td>Odor Threshold Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>100 °C / 210 °F</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.010</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Soluble in water</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
</tbody>
</table>
Decomposition Temperature  Not determined
Kinematic Viscosity      Not determined
Dynamic Viscosity       Not determined
Explosive Properties    Not determined
Oxidizing Properties   Not determined
VOC Content            5.09

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 does not occur.

Conditions to Avoid
Keep out of reach of children.

Incompatible Materials
None known based on information supplied.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact       Avoid contact with eyes.
Skin Contact      Causes mild skin irritation.
Inhalation        Do not inhale.
Ingestion         Do not ingest.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol Monobutyl Ether</td>
<td>= 470 mg/kg (Rat)</td>
<td>= 2270 mg/kg (Rat)</td>
<td>= 220 mg/kg (Rabbit)</td>
</tr>
<tr>
<td>111-76-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>= 4220 mg/kg (Rat)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>144-55-8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information on physical, chemical and toxicological effects

Symptoms
Please see section 4 of this SDS for symptoms.

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

Group 3 IARC components are "not classifiable as human carcinogens".

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol Monobutyl Ether</td>
<td>A3</td>
<td>Group 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>111-76-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 3 IARC components are "not classifiable as human carcinogens"

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

The 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.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol Monobutyl Ether</td>
<td>1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50</td>
<td>1698 - 1940: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>111-76-2</td>
<td>650: 120 h Nitzschia linearis mg/L EC50</td>
<td>8250 - 9000: 96 h Lepomis macrochirus mg/L LC50 static</td>
<td>2350: 48 h Daphnia magna mg/L EC50</td>
<td></td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>144-55-8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol Monobutyl Ether</td>
<td>0.81</td>
</tr>
<tr>
<td>111-76-2</td>
<td></td>
</tr>
</tbody>
</table>

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
15. REGULATORY INFORMATION

International Inventories

- **TSCA**: Complies
- **DSL**: Does not comply
- **NDSL**: Does not comply
- **EINECS**: Does not comply
- **ELINCS**: Does not comply
- **ENCs**: Does not comply
- **IECSC**: Does not comply
- **KECL**: Does not comply
- **PICCS**: Does not comply
- **AICS**: Does not comply

Legend:
- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- **EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- **ENCS** - Japan Existing and New Chemical Substances
- **IECSC** - China Inventory of Existing Chemical Substances
- **KECL** - Korean Existing and Evaluated Chemical Substances
- **PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- **AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations**

**SARA 313**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol Monobutyl Ether - 111-76-2</td>
<td>111-76-2</td>
<td>5-15</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**US State Regulations**

**U.S. State Right-to-Know Regulations**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol Monobutyl Ether 111-76-2</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

Issue Date: 18-Jul-2006
Revision Date: 18-Jul-2014
Revision Note: New format

Disclaimer
The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet