1. Identification

Product identifier: PROTECTIVE COATING

Other means of identification:
- Product code: HIL00291
- Recommended use: Floor Finish
- Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name: HILLYARD INDUSTRIES
Address: 302 North Fourth St.
St. Joseph, MO 64501

Contact person: Regulatory Affairs
Telephone number: (816) 233-1321 (Ext. 8285)
Fax: (816) 383-8485
E-mail: regulatoryaffairs@hillyard.com
Emergency telephone #: (800) 424-9300
(Only in the event of chemical emergency involving a spill, leak, fire, exposure, or accident involving chemicals.)

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards: Not classified.

Environmental hazards: Hazardous to the aquatic environment, acute Category 3 hazard

OSHA defined hazards: Not classified.

Label elements

Hazard symbol: None.
Signal word: None.
Hazard statement: Harmful to aquatic life.

Precautionary statement

Prevention: Avoid release to the environment.
Response: Wash hands after handling.
Storage: Store away from incompatible materials.
Disposal: Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law in compliance with applicable federal, state and local requirements.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipropylene glycol monomethyl ether</td>
<td></td>
<td>34590-94-8</td>
<td>3 - 5</td>
</tr>
<tr>
<td>2-(2-ethoxyethoxy)ethanol</td>
<td></td>
<td>111-90-0</td>
<td>1 - 3</td>
</tr>
<tr>
<td>Tributoxyethyl Phosphate</td>
<td></td>
<td>78-51-3</td>
<td>1 - 3</td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td></td>
<td>90 - 100</td>
</tr>
</tbody>
</table>
4. First-aid measures

Inhalation  
Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact  
Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact  
Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Continue rinsing.

Ingestion  
Drink water as a precaution. Get medical attention if any discomfort continues.

Most important symptoms/effects, acute and delayed  
Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed  
Treat symptomatically.

General information  
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media  
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media  
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical  
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters  
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions  
Move containers from fire area if you can do so without risk.

Specific methods  
Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards  
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures  
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Material can be slippery when wet. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Follow precautions for safe handling described in this safety data sheet. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up  
This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions  
Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling  
Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities  
Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).
8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipropylene glycol monomethyl ether (CAS 34590-94-8)</td>
<td>PEL</td>
<td>600 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 ppm</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipropylene glycol monomethyl ether (CAS 34590-94-8)</td>
<td>STEL</td>
<td>150 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>100 ppm</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipropylene glycol monomethyl ether (CAS 34590-94-8)</td>
<td>STEL</td>
<td>900 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>150 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>600 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 ppm</td>
</tr>
</tbody>
</table>

US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-ethoxyethoxy)ethanol (CAS 111-90-0)</td>
<td>TWA</td>
<td>140 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25 ppm</td>
</tr>
</tbody>
</table>

Biological limit values
No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US - California OELs: Skin designation
Dipropylene glycol monomethyl ether (CAS 34590-94-8) Can be absorbed through the skin.

US - Tennessee OELs: Skin designation
Dipropylene glycol monomethyl ether (CAS 34590-94-8) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation
Dipropylene glycol monomethyl ether (CAS 34590-94-8) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation
Dipropylene glycol monomethyl ether (CAS 34590-94-8) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
Dipropylene glycol monomethyl ether (CAS 34590-94-8) Can be absorbed through the skin.

Appropriate engineering controls
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection
Not normally needed.

Skin protection
Hand protection
Not normally needed.
Other
Not normally needed.

Respiratory protection
No personal respiratory protective equipment normally required.

Thermal hazards
Not applicable.

General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance
White emulsion
### Physical state
Liquid.

### Form
Liquid.

### Color
White

### Odor
non-objectionable odor

### Odor threshold
Not available

### pH
8 - 9

### Melting point/freezing point
Not applicable / Not available

### Initial boiling point and boiling range
> 200 °F (> 93.33 °C)

### Flash point
> 200.0 °F (> 93.3 °C) Tag Closed Cup

### Evaporation rate
< 1 (ethyl ether = 1)

### Flammability (solid, gas)
Not available.

### Upper/lower flammability or explosive limits
- **Explosive limit - lower (%)** Not available.
- **Explosive limit - upper (%)** Not available.

### Vapor pressure
17.2 mm Hg

### Vapor density
1.5 Air=1

### Relative density
1.027 at 77°F

### Solubility(ies)
- **Solubility (water)** Dispersable
- **Partition coefficient (n-octanol/water)** Not available

### Auto-ignition temperature
Not available

### Decomposition temperature
Not available

### Viscosity
Not available

### Other information
- **Density** 8.55 lb/gal
- **Percent volatile** 80 - 82%
- **VOC (Weight %)** CARB Complaint

**10. Stability and reactivity**

### Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

### Chemical stability
Material is stable under normal conditions.

### Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

### Conditions to avoid
Avoid temperatures exceeding the flash point. Contact with incompatible materials.

### Incompatible materials
Strong oxidizing agents.

### Hazardous decomposition products
No hazardous decomposition products are known.

**11. Toxicological information**

### Information on likely routes of exposure
- **Inhalation** Prolonged inhalation may be harmful.
- **Skin contact** May be irritating to the skin.
- **Eye contact** Direct contact with eyes may cause temporary irritation.
- **Ingestion** Expected to be a low ingestion hazard.

### Symptoms related to the physical, chemical and toxicological characteristics
Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

#### Acute toxicity
Toxicity data is not available for this mixture. Data below are estimates based on summation methods.
<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROTECTIVE COATING</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dermal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>44365.2383 mg/kg estimated</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Guinea pig</td>
<td>69444.4453 mg/kg estimated</td>
</tr>
<tr>
<td>Mouse</td>
<td></td>
<td>303.2258 g/kg estimated</td>
</tr>
<tr>
<td>Rat</td>
<td></td>
<td>53401.9922 mg/kg estimated</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation**

Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation**

Direct contact with eyes may cause temporary irritation.

**Respiratory or skin sensitization**

Not a respiratory sensitizer.

**Skin sensitization**

This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.


Not listed.

**Reproductive toxicity**

This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**

Not classified.

**Specific target organ toxicity - repeated exposure**

Not classified.

**Aspiration hazard**

Not an aspiration hazard.

**Chronic effects**

Prolonged inhalation may be harmful.

### 12. Ecological information

**Ecotoxicity**

Harmful to aquatic life.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROTECTIVE COATING</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fish</td>
</tr>
<tr>
<td></td>
<td></td>
<td>124.0799 mg/l, 48 hours estimated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>481.9593 mg/l, 96 hours estimated</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Persistence and degradability**

No data is available on the degradability of this product.

**Bioaccumulative potential**

No data available.

**Mobility in soil**

No data available.

**Other adverse effects**

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal instructions**

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not contaminate ponds, waterways or ditches with chemical or used container. Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law.

**Local disposal regulations**

Dispose in accordance with all applicable regulations.

**Hazardous waste code**

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Triple rinse (or equivalent). Then offer clean, dry container for recycling or reconditioning.

14. Transport information
DOT
Not regulated as dangerous goods.

15. Regulatory information
US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.
SARA 304 Emergency release notification
Not regulated.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.
SARA 311/312 Hazardous chemical
No
SARA 313 (TRI reporting)
Not regulated.

Other federal regulations
Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations
US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.
US. Massachusetts RTK - Substance List
Dipropylene glycol monomethyl ether (CAS 34590-94-8)
US. New Jersey Worker and Community Right-to-Know Act
Dipropylene glycol monomethyl ether (CAS 34590-94-8)
US. Pennsylvania Worker and Community Right-to-Know Law
Dipropylene glycol monomethyl ether (CAS 34590-94-8)
US. Rhode Island RTK
Not regulated.
US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

"A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).
16. Other information, including date of preparation or last revision

Issue date: 03-05-2015
Version #: 01

HMIS® ratings
Health: 0
Flammability: 0
Physical hazard: 0

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