1. Product and Company Identification

Product Code: 442-CLEAR
Product Name: 442 Clear WB Urethane Top Coat (Gloss) Part A
Trade Name: 442 Clear WB Urethane Top Coat (Gloss) Part A

Manufacturer Information

Company Name: Epoxy Systems, Inc.
20774 W Pennsylvania Ave
Dunnellon, Florida 34431
Phone Number: +1 (352) 489-1666
Emergency Contact: PERS (USA) (800) 633-8253
Alternate Emergency Contact: PERS (International) +1 (801) 629-0667

Intended Use: Industrial floor coatings.

2. Hazards Identification

GHS Classification

<table>
<thead>
<tr>
<th>Serious Eye Damage/Eye Irritation, Category 2B</th>
<th>Placard</th>
<th>Key Word</th>
<th>GHS hazard phrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>Warning</td>
<td></td>
<td>Causes eye irritation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Skin Corrosion/Irritation, Category 3</th>
<th>Placard</th>
<th>Key Word</th>
<th>GHS hazard phrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>Warning</td>
<td></td>
<td>Causes mild skin irritation</td>
</tr>
</tbody>
</table>

GHS Hazard Phrases

H320 - Causes eye irritation.
H316 - Causes mild skin irritation.
H335 - May cause respiratory irritation.
H303 - May be harmful if swallowed.

GHS Precaution Phrases

P103 - Read label before use. P281 - Use personal protective equipment as required.
P262 - Do not get in eyes, on skin, or on clothing. P261 - Avoid breathing mist/vapors/spray. P264 - Wash hands thoroughly after handling.

GHS Response Phrases

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+313 - If eye irritation persists, get medical advice/attention.
P302+352 - IF ON SKIN: Wash with plenty of soap and water. P332+313 - If skin irritation occurs, get medical advice/attention.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P314 - Get medical attention/advice if you feel unwell.

GHS Storage and Disposal Phrases

P404 - Store in a closed container.
P402 - Store in a dry place.
P401 - Store at 45-80 degrees Fahrenheit.
Potential Health Effects (Acute and Chronic)
May cause eye irritation. May cause skin irritation. May cause respiratory irritation. May be harmful if swallowed.

Inhalation
May cause respiratory irritation.

Skin Contact
May cause skin irritation.

Eye Contact
May cause eye irritation.

Ingestion
May be harmful if swallowed.

Medical Conditions Generally Aggravated By Exposure
Skin disorders, Respiratory disorders, Eye disorders, Skin Allergies.

OSHA Regulatory Status:
This material is classified as hazardous under OSHA regulations.

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol monopropyl ether</td>
<td>2807-30-9</td>
<td>1.0 - 5.0 %</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>102-71-6</td>
<td>1.0 - 5.0 %</td>
</tr>
<tr>
<td>2-Propanol, 1-Butoxy</td>
<td>5131-66-8</td>
<td>1.0 - 5.0 %</td>
</tr>
<tr>
<td>N-Methyl-2-pyrrolidone</td>
<td>872-50-4</td>
<td>&lt;1.5 %</td>
</tr>
</tbody>
</table>

4. First Aid Measures

Emergency and First Aid Procedures

In Case of Inhalation
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If experiencing respiratory symptoms: Get medical attention immediately.

In Case of Skin Contact
In case of contact, immediately wash skin with soap and copious amounts of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists.

In Case of Eye Contact
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

In Case of Ingestion
If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately. For further assistance, contact your local Poison Control Center.

Signs and Symptoms Of Exposure
Mild irritation effect.

5. Fire Fighting Measures

Flash Pt: NA  Method Used: Not Applicable
Explosive Limits:  LEL: NE  UEL: NE
Autoignition Pt:  No data available.

Fire Fighting Instructions
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Use water spray to cool unopened containers.

Flammable Properties and Hazards
Product will not support combustion as supplied. Product is not considered a fire hazard. Closed containers may rupture (due to build up in pressure) when exposed to extreme heat.
Hazardous Combustion Products
In a fire, product may produce the following: Carbon monoxide, Carbon dioxide.

Suitable Extinguishing Media
Will not support combustion.

Unsuitable Extinguishing Media
Will not support combustion.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled
PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL.
Evacuate area. Absorb with sand or vermiculite and place in closed containers for disposal. Ventilate the area.

Protective Precautions, Protective Equipment and Emergency Procedures
Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

Environmental Precautions
Prevent entry into waterways, sewers, basements or confined areas.

7. Handling and Storage

Hazard Label Information:
Avoid contact with skin and eyes. Do not get on skin and clothing. Keep from freezing. Store in a closed container.

Precautions To Be Taken in Handling
Provide adequate ventilation. Do not breathe vapor. Do not get in eyes, on skin or on clothing.

Precautions To Be Taken in Storing
Keep from freezing. Keep container closed when not in use.

Other Precautions
Wash thoroughly after handling.

8. Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol monopropyl ether</td>
<td>2807-30-9</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>102-71-6</td>
<td>No data.</td>
<td>5 mg/m3</td>
<td>No data.</td>
</tr>
<tr>
<td>2-Propanol, 1-Butoxy-</td>
<td>5131-66-8</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>N-Methyl-2-pyrrolidone</td>
<td>872-50-4</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>

Protective Equipment Summary - Hazard Label Information:
Neoprene gloves Safety glasses, or goggles. Impervious clothing.

Respiratory Equipment (Specify Type)
Normally when good engineering controls are used, no respiratory protection is needed. However, if cured product is abraded by sanding or grinding use a NIOSH approved air-purifying respirator. Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Eye Protection
Safety glasses, or goggles.

Protective Gloves
Nitrile rubber and Neoprene are recommended.
Other Protective Clothing
Where splashing is possible, full chemically resistant protective clothing, safety glasses or face shield and boots are required.

Engineering Controls (Ventilation etc.)
Good general ventilation should be sufficient to control airborne levels. Safety shower and eye bath.

Work/Hygienic/Maintenance Practices
Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

Environmental Exposure Controls
Avoid release to the environment. Avoid runoff into storm sewers and ditches which lead to waterways.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical States:</th>
<th>[ ] Gas</th>
<th>[ X ] Liquid</th>
<th>[ ] Solid</th>
</tr>
</thead>
</table>
| Melting Point:    | No data.
| Boiling Point:    | >= 212.00 F |
| Autoignition Pt:  | No data.
| Flash Pt:         | NA Method Used: Not Applicable |
| Explosive Limits: | LEL: NE UEL: NE |
| Specific Gravity (Water = 1): | ~ 1.03 |
| Density:          | ~ 8.62 |
| Vapor Pressure (vs. Air or mm Hg): | NE |
| Vapor Density (vs. Air = 1):   | NE |
| Evaporation Rate: | NE |
| Solubility in Water: | Soluble |

Solubility Notes
Water soluble.

Percent Volatile: >= 70.0 % by volume.

HAP / Volume: NP

Saturated Vapor Concentration: NE

Appearance and Odor
Milky. Faint.

10. Stability and Reactivity

Stability: Unstable [ ] Stable [ X ]

Reactivity
None known.

Conditions To Avoid - Instability
None known.

Incompatibility - Materials To Avoid
Strong oxidizing agents. Water reactives.

Hazardous Decomposition Or Byproducts
Carbon dioxide, Carbon monoxide, Nitrogen oxides.

Possibility of Hazardous Polymerization:
Will occur [ ] Will not occur [ X ]

Conditions To Avoid - Hazardous Reactions
None known.
11. Toxicological Information

Toxicological Information
Product not considered to be a toxic mixture.

Chronic Toxicological Effects
No data available.

Irritation or Corrosion
No data available.

Symptoms related to Toxicological Characteristics
No data available.

Hazardous Components (Chemical Name) | CAS # | NTP | IARC | ACGIH | OSHA
--- | --- | --- | --- | --- | ---
1. Ethylene glycol monopropyl ether | 2807-30-9 | n.a. | n.a. | n.a. | n.a.
2. Triethanolamine | 102-71-6 | n.a. | 3 | n.a. | n.a.
3. 2-Propanol, 1-Butoxy- | 5131-66-8 | n.a. | n.a. | n.a. | n.a.

12. Ecological Information

General Ecological Information
No data available.

Results of PBT and vPvB assessment
No data available.

Persistence and Degradability
No data available.

Bioaccumulative Potential
not reported, unknown.

Mobility in Soil
not reported, unknown.

13. Disposal Considerations

Waste Disposal Method
Incinerate or dispose of unused material, residues and containers in a licensed facility in accordance with all applicable local, state and federal regulations. Do not discharge substance/product into sewage system.

14. Transport Information

LAND TRANSPORT (US DOT)
DOT Proper Shipping Name
Not Regulated.
Precautionary Label
May cause skin, eye, and respiratory irritation. Always read Safety Material Data Sheet before use.

LAND TRANSPORT (Canadian TDG)
TDG Shipping Name
Not Regulated.

AIR TRANSPORT (ICAO/IATA)
ICAO/IATA Shipping Name
Not Regulated.

MARINE TRANSPORT (IMDG/IMO)
IMDG/IMO Shipping Name
Not Regulated.

15. Regulatory Information

US EPA SARA Title III

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>Sec.302 (EHS)</th>
<th>Sec.304 RQ</th>
<th>Sec.313 (TRI)</th>
<th>Sec.110</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ethylene glycol monopropyl ether</td>
<td>2807-30-9</td>
<td>No</td>
<td>No</td>
<td>Yes-Cat. N230</td>
<td>No</td>
</tr>
</tbody>
</table>
Hazardous Components (Chemical Name) | CAS #  | Sec.302 (EHS) | Sec.304 RQ | Sec.313 (TRI) | Sec.110 |
--- | --- | --- | --- | --- | --- |
2. Triethanolamine | 102-71-6 | No | No | No | No |
3. 2-Propanol, 1-Butoxy- | 5131-66-8 | No | No | No | No |
4. N-Methyl-2-pyrrolidone | 872-50-4 | No | No | Yes | No |

**Regulatory Information**

SARA Section 311/312: Acute Health Hazard.

16. Other Information

CA=CIRCA  NA=NOT AVAILABLE  NE=NOT ESTABLISHED  NR=NOT REGULATED  NP= NOT APPLICABLE  PR=PROPRIETARY  TS=TRADE SECRET  ?=UNKNOWN.

**Company Policy or Disclaimer**

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