1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**

**Product Name** United 291 SHINING ARMOR

**Other means of identification**

**SDS #** UNITED-291

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Ultra-Solids Floor Finish

**Uses Advised Against** For industrial and institutional use only.

**Details of the supplier of the safety data sheet**

**Supplier Address**

United Laboratories, Inc.
320 37th Avenue
St. Charles, IL 60174
www.unitedlabsinc.com
www.unitedlabsinc.ca

**Emergency Telephone Number**

**Company Phone Number** 800-323-2594 (to reorder)

**Emergency Telephone (24 hr)** INFOTRAC 1-800-535-5053 (North America)
1-352-323-3500 (International)

2. HAZARDS IDENTIFICATION

**Appearance** Milky white liquid **Physical State** Liquid **Odor** Characteristic odor

**Classification**

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

**Other Hazards**

Harmful to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tributoxyethyl phosphate</td>
<td>78-51-3</td>
<td>1-5</td>
</tr>
<tr>
<td>Glycol ether TMP</td>
<td>25498-49-1</td>
<td>1-5</td>
</tr>
<tr>
<td>Di(ethylene glycol) ethyl ether</td>
<td>111-90-0</td>
<td>1-5</td>
</tr>
<tr>
<td>Dipropylene Glycol Monomethyl Ether (DPM)</td>
<td>34590-94-8</td>
<td>1-5</td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

**First Aid Measures**

**Eye Contact**

Immediately flush with plenty of water for at least 15 minutes while holding eyelids open. Get prompt medical attention.
Skin Contact  
Wash with soap and plenty of water. Wash clothing before reuse.

Inhalation  
Remove to fresh air. If symptoms develop, seek medical attention.

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

**Most important symptoms and effects**

**Symptoms**  
Can cause mild to moderate eye irritation. May cause mild skin irritation. Prolonged or repeated contact may dry or defat skin leading to inflammation. Excessive inhalation of vapors may cause nasal and respiratory irritation. Can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician**  
Treat symptomatically.

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**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**  
Foam. Carbon dioxide (CO2). Dry chemical.

**Unsuitable Extinguishing Media**  
Not determined.

**Specific Hazards Arising from the Chemical**  
None known.

**Hazardous Combustion Products**  
When ignited, as in a fire, this product may produce carbon monoxide and carbon dioxide.

**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. All containers should be cooled with water to prevent vapor pressure build up.

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions**  
Use personal protective equipment as required.

**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**  
Small spills: Soak up with an inert absorbent and place in designated disposal container. Wash area thoroughly. Do not flush to sewer, stream or other bodies of water. Large spills: Contain material, if a substantial quantity is spilled, recover with pump or vacuum. Otherwise, soak up with an inert absorbent and place in designated disposal container. Wash area thoroughly. Do not flush to sewer, stream or other bodies of water.

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**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on Safe Handling**  
Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors.
Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep containers tightly closed when not in use. Store in a cool and dry area.

Incompatible Materials: Strong oxidizing agents such as bleach.

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>Dipropylene Glycol Monomethyl Ether (DPM) 34590-94-8</td>
<td>STEL: 150 ppm TWA: 100 ppm</td>
<td>TWA: 100 ppm TWA: 600 mg/m³ (vacated) TWA: 100 ppm TWA: 600 mg/m³ (vacated) STEL: 150 ppm (vacated) STEL: 900 mg/m³ (vacated) S* S*</td>
<td>IDLH: 600 ppm TWA: 100 ppm TWA: 600 mg/m³ STEL: 150 ppm STEL: 900 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls: Mechanical ventilation recommended to reduce exposure.

Individual protection measures, such as personal protective equipment

Eye/Face Protection: Safety goggles recommended.

Skin and Body Protection: Chemical resistant gloves recommended. Wear impervious clothing and boots.

Respiratory Protection: None required if good ventilation is maintained. If TLV is exceed, use a NIOSH/ MSHA approved respirator.

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>Milky white liquid</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Milky white</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic odor</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>9-10</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 / 212 °F</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&lt;1</td>
<td>(BA=1)</td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Liquid- not applicable</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>9.5</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>17.5 mm Hg</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>&lt;1</td>
<td>(Air=1)</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.05</td>
<td>(Water = 1)</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Completely soluble</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>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
</tbody>
</table>
Kinematic Viscosity  Not determined
Dynamic Viscosity  Not determined
Explosive Properties  Not determined
Oxidizing Properties  Not determined
VOC Content  <5%

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.

Conditions to Avoid
Keep out of reach of children.

Incompatible Materials
Strong oxidizing agents such as bleach.

Hazardous Decomposition Products
When strongly heated, as in a fire, this product may produce oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact
Avoid contact with eyes.

Skin Contact
Repeat exposure may cause skin dryness or cracking.

Inhalation
Avoid breathing vapors or mist.

Ingestion
Do not taste or swallow.

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>tributoxyethyl phosphate 78-51-3</td>
<td>= 3000 mg/kg (Rat)</td>
<td>&gt; 5000 mg/kg (Rabbit)</td>
<td>&gt; 6.4 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>Di(ethylene glycol) ethyl ether 111-90-0</td>
<td>= 1920 mg/kg (Rat)</td>
<td>= 4200 µL/kg (Rabbit) = 6 mL/kg (Rat)</td>
<td>&gt; 5240 mg/m³ (Rat) 4 h</td>
</tr>
<tr>
<td>Glycol ether TPM 25498-49-1</td>
<td>= 3184 mg/kg (Rat)</td>
<td>= 15440 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>Dipropylene Glycol Monomethyl Ether (DPM) 34590-94-8</td>
<td>= 5230 mg/kg (Rat)</td>
<td>= 9500 mg/kg (Rabbit)</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
This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
12. ECOLOGICAL INFORMATION

**Ecotoxicity**
Not determined.

**Persistence/Degradability**
Not determined.

**Bioaccumulation**
Not determined.

**Mobility**
Not determined.

**Other Adverse Effects**
Not determined.

13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods**

<table>
<thead>
<tr>
<th>Description</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disposal of Wastes</strong></td>
<td>Disposal should be in accordance with applicable regional, national and local laws and regulations.</td>
</tr>
<tr>
<td><strong>Contaminated Packaging</strong></td>
<td>Disposal should be in accordance with applicable regional, national and local laws and regulations.</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

**DOT**
Not regulated.

**IATA**
Not regulated.

**IMDG**
Not regulated.

15. REGULATORY INFORMATION

**International Inventories**

**TSCA**
All ingredients are listed or exempt from listing on Chemical Substance Inventory

Legend:
*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

**US Federal Regulations**

**SARA 313**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which is subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part. 372. Di(ethylene glycol) ethyl ether, 111-90-0. Glycol ether TPM, 25498-49-1. Dipropylene Glycol Monomethyl Ether (DPM), 34590-94-8. All three chemicals are 1.0% Threshold Value.

**US State Regulations**

**California Proposition 65**
This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.
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>Di(ethylene glycol) ethyl ether 111-90-0</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Glycol ether TPM 25498-49-1</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Dipropylene Glycol Monomethyl Ether (DPM) 34590-94-8</td>
<td>X</td>
<td>X</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>Not determined</td>
<td>Not determined</td>
<td>Not determined</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>N+P</td>
</tr>
</tbody>
</table>

Issue Date: 29-Sep-2009
Revision Date: 01-Dec-2016
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