MATERIAL SAFETY DATA SHEET

1. COMPANY AND PRODUCT IDENTIFICATION

DUNCAN ENTERPRISES
5673 East Shields Avenue
Fresno, CA 93727
559-291-4444
559-291-9444 (Fax)

EMERGENCY TELEPHONE NUMBERS
Health Emergency: 559-291-4444 7:00 am – 3:30 pm Pacific Standard Time
Spill and Off-Hour Health Emergencies: 800-424-9300 U.S. and Canada
703-527-3887 Outside U.S. and Canada (Collect)

Product Name: DUNCAN COVER-COAT® OPAQUE UNDERGLAZES
Product Type: Nontoxic Ceramic Glaze

2. COMPOSITION / INFORMATION ON INGREDIENTS

The ingredients in this formulation are a trade secret. All ingredients in the formula are non-hazardous, unless specified in Sections 3 and 15.

3. HAZARDS IDENTIFICATION

HMIS Hazard Ratings for Product
Health: 1 0 = Minimal
Flammability: 0 1 = Slight
Reactivity: 0 2 = Moderate
Personal Protection: See Section 8 3 = Serious
* = Chronic Effects

4. FIRST AID MEASURES

Eye Contact: Flush eyes with large amounts of water until irritation subsides. Consult a physician if irritation persists.
Skin Contact: Wash affected skin areas thoroughly with soap and water. Consult a physician if irritation persists.
Inhalation: Move subject to fresh air.
Ingestion: If swallowed, give two glasses of water to drink. Consult a physician. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Autoignition Temperature: Nonflammable
Flash Point: Not Applicable
Upper Explosive Limit (%): Not Applicable
Lower Explosive Limit (%): Not Applicable
Extinguisher Media: Product is nonflammable – Use extinguishing media appropriate for surrounding fire
Special Firefighting Procedures: Not Applicable
Fire & Explosion Hazards: Not Applicable
NFPA Flammability Hazard Class: 0 = Insignificant
6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Spills should be taken up with suitable absorbent material and placed in containers. Spill areas can be washed with water; collect wash water for approved disposal. Do not flush to storm sewer or waterway.

For safety and environmental precautions, please review entire Material Safety Data Sheet for necessary information.

7. HANDLING AND STORAGE

Storage Temperature: 40° - 100°F
Handling / Storage: Protect from freezing; keep container sealed when not in use
Ventilation Requirements: General

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Conditions Under Which Personal Protective Equipment Required
Eye Protection Requirements: Wear safety glasses with side shields
Glove Requirements: Gloves are not normally required for foreseeable conditions of use
Clothing Requirements: Protective clothing is normally not necessary for foreseeable conditions of use
Change / Removal of Clothing: None required
Wash Requirements: Good hygiene practices should be followed
Respirator Requirements: NIOSH approved respirator for sprays and mists recommended if using a sprayer
Ventilation Requirements: General; local exhaust ventilation recommended when spraying

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance / Physical Description: Colored liquid. Odorless
pH: 7 - 10
Boiling Point: 212°F
Freezing Point: 32°F
Melting Point: 1800°F
Solubility in Water: Miscible
Specific Gravity (Water = 1): 1.3 – 1.8
Bulk Density: 10.8 – 15.0 lb / gal
Evaporation Rate (Water = 1): 1
Vapor Pressure: 17.5 mm Hg @ 20°C (68°F)
Autoignition Temperature: Not Applicable
Flash Point: Not Applicable
Oxidizing Properties: Not Applicable

10. STABILITY AND REACTIVITY

Stability: Stable
Incompatible Materials: None known
NFPA Reactivity Hazard Class: 0 = Insignificant
Hazardous Decomposition Products: Avoid fumes when firing
Hazardous Polymerization: Will not occur
Conditions to Avoid: None Known
11. TOXICOLOGICAL INFORMATION

**Short – Term Effects of Exposure**

Routes of Entry:
- **Inhalation:** No
- **Skin Contact:** No
- **Ingestion:** Yes

Acute Effects – **Eye:** Abrasive, can scratch eyes
Acute Effects – **Skin Contact:** No hazard in normal industrial use.
Acute Effects – **Inhalation:** No hazard in normal industrial use.
Acute Effects – **Ingestion:** No hazard in normal industrial use.

**Long – Term Effects of Exposure**

Effect of Chronic Exposure: This product should be considered non-hazardous and has no known chronic effects.

Target Organs: Not applicable
Carcinogenicity: 
- **IARC Monographs:** No
- **NTP:** No
- **OSHA Regulated:** No

12. ECOLOGICAL INFORMATION

No Applicable Data

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Waste disposal should be in accordance with existing Federal, State, and Local environmental regulations.

14. TRANSPORT INFORMATION

**U.S. Department of Transportation Information**

- **DOT Shipping Name:** Glazes or Stains, Ceramic or Pottery, Artists or Hobbyists Liquid
- **DOT Hazard Class:** 88690 Sub. 1
- **DOT Reportable Quantity:** None

15. REGULATORY INFORMATION

- **TSCA:** All components are on the TSCA Inventory
- **FDA:** 21 CFR 175.105
- **SARA/Title III:** This product contains no substances at or above the reported threshold under Section 313, based on available data.

Products bearing the Nontoxic Product Seal are certified in a program of toxicological evaluation by a nationally recognized toxicologist to contain no materials in sufficient quantities to be toxic or injurious to humans or to cause acute or chronic health problems. These products are certified to be labeled in accordance with the voluntary chronic hazard labeling standard ASTM D-4236. In addition, there is no physical hazard as defined within 29 CFR Part 1910.1200(c).

16. OTHER INFORMATION

**Table of Abbreviations**

- **ACGIH:** American Conference of Governmental Industrial Hygienists
- **ANSI:** American National Standards Institute
- **ASTM:** American Society for Testing Materials
- **°C:** Degrees Centigrade
- **CAS:** Chemical Abstract Service

Duncan Enterprises Material Safety Data Sheet – Cover-Coat Opaque Underglazes
### Table of Abbreviations (Continued)

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CERCLA</td>
<td>Comprehensive Environmental Response, Compensation and Liability Act</td>
</tr>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>CPR</td>
<td>Controlled Products Regulations</td>
</tr>
<tr>
<td>DOT</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>°F</td>
<td>Degrees Fahrenheit</td>
</tr>
<tr>
<td>FDA</td>
<td>Food &amp; Drug Administration</td>
</tr>
<tr>
<td>Hg</td>
<td>Mercury</td>
</tr>
<tr>
<td>HMIS</td>
<td>Hazardous Materials Identification System</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>LD</td>
<td>Lethal Dose</td>
</tr>
<tr>
<td>mg / kg</td>
<td>Milligram per kilogram</td>
</tr>
<tr>
<td>mm</td>
<td>Millimeter</td>
</tr>
<tr>
<td>MSDS</td>
<td>Material Safety Data Sheet</td>
</tr>
<tr>
<td>MSHA</td>
<td>Mine Safety and Health Administration</td>
</tr>
<tr>
<td>N / A</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>NFPA</td>
<td>National Fire Protection Association</td>
</tr>
<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety and Health</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
</tr>
<tr>
<td>ppm</td>
<td>Parts per million</td>
</tr>
<tr>
<td>SARA</td>
<td>Superfund Amendment and Reauthorization Act</td>
</tr>
<tr>
<td>STEL</td>
<td>Short-Term Exposure Limit</td>
</tr>
<tr>
<td>TSCA</td>
<td>Toxic Substances Control Act</td>
</tr>
<tr>
<td>TWA</td>
<td>Time-Weighted Average</td>
</tr>
<tr>
<td>U.N.</td>
<td>United Nations</td>
</tr>
<tr>
<td>WHMIS</td>
<td>Workplace Hazardous Materials Information System</td>
</tr>
<tr>
<td>&gt;</td>
<td>Greater Than</td>
</tr>
<tr>
<td>&lt;</td>
<td>Less Than</td>
</tr>
</tbody>
</table>

**Disclaimer**
The information given and the recommendations made herein apply to our product(s) alone and not combined with any other product(s). Such are based on our research and on data from other reliable sources and are believed to be accurate. No guarantee of accuracy is made. It is the purchaser’s responsibility before using any product to verify this data under their own operating conditions and to determine whether the product is suitable for their purposes.