



Safety Data Sheet

1. COMPANY AND PRODUCT IDENTIFICATION

Duncan Enterprises
 5673 East Shields Avenue
 Fresno, CA 93727
 559-291-4444
 559-291-9444 (Fax)
 www.duncanceramics.com

EMERGENCY TELEPHONE NUMBERS

Health Emergencies:
 559-291-4444 7:00 am – 3:30 pm Pacific Std. 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 Metallic Glazes (SY Series)
Product Use/Description: Ceramic Underglaze

| Item | Description | Item | Description |
|--------|----------------|--------|------------------|
| SY1024 | Antique Pewter | SY1028 | Bronze Patina |
| SY1025 | Heirloom | SY1029 | Rhodium |
| SY1026 | Modern Brass | SY1030 | Brass Halo |
| SY1027 | Weathered Iron | SY1031 | Burnished Bronze |

Restrictions on use: None known.

2. HAZARDS IDENTIFICATION

| | |
|------------------------------------|---|
| Classification: | Non-classified. |
| Hazard Statement: | Causes eye irritation. |
| Other Hazards: | None |
| Signal Word: | Warning |
| Precautionary Statement(s): | Do not get in eyes. Wash thoroughly after handling Do not eat, drink, or smoke when using this product. |
| Pictogram(s) by GHS: | None |

3. COMPOSITION / INFORMATION ON INGREDIENTS

Detailed formulation is submitted by the client and it is proprietary information.

Products are made by physical manipulation and chemical reaction from the ingredients. These chemicals may not exist as its original formula in final products.

The glaze is a mixture of ceramic material containing, water, non-lead frits, clays, and other minerals and color pigments. Contains potential carcinogens: Crystalline silica (quartz) may be present in clays. Pigments may contain a very small amount of bound titanium dioxide, cobalt, chromium and other metals. Other ingredients present have unknown acute toxicity.

Reportable ingredients (if applicable):

| Substance/Composition: | CAS Number: | Percentage/Range: |
|-------------------------------|--------------------|--------------------------|
| Water | 7732-18-5 | 45 – 50 % |
| Various Clays | Varies | Proprietary |
| Frit (non-lead bearing) | 65997-18-4 | 4 – 50 % |
| Silica (quartz) | 14808-60-7 | Proprietary |
| Carboxymethylcellulose | 9004-32-4 | <2 % |
| Cryolite | 15096-52-3 | <5 % |
| Pignments | Varies | Proprietary |

4. FIRST AID MEASURES

| | |
|----------------------------------|---|
| General Advice: | |
| On Inhalation: | Seek fresh air. Remove from exposure. |
| On Skin Contact: | Wash skin with soap and water. |
| On Eye Contact: | May cause irritation. Flush eyes with large quantities of water for at least 15 minutes. Contact a physician if irritation continues. |
| On Ingestion: | Contact a physician. |
| Acute/Delayed Symptoms: | No data. |
| Medical Advice: | Remove from exposure, flush eyes or skin with water. Contact a physician if irritation continues. |
| Symptoms /Effects: | Irritation of the eye |
| Special Treatment Needed: | None required under normal use. |

5. FIRE FIGHTING MEASURES

| | |
|--|-------------------------------|
| Extinguishing Media | |
| Suitable extinguishing media: | Water, CO ₂ , Foam |
| Unsuitable extinguishing media: | None |
| Protection of Firefighters | |
| Specific hazards arising from the chemical: | No data. |
| Protective equipment for firefighters: | No data. |
| Special precautions for fire fighters: | No data. |
| Will hazardous combustion occur? | Will not occur. |

6. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal Precautions: | No data. |
| Environmental Precautions: | No data. |
| Methods for Cleaning Up: | Contain and use absorbed material for disposal. Rinse with water. |
| Emergency Procedures: | No data. |
| Recommended Personal Protective Equipment: | None. |
| Emergency Containment/Procedures: | No data. |

7. HANDLING AND STORAGE

| | |
|---------------------------------|---|
| Safe Storage: | Protect from freezing. |
| Safe Handling: | Avoid skin and eye contact. Wash hands after use, do not eat, drink or smoke in work areas. |
| Known Incompatibilities: | None known. |

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Occupational Exposure Limits:

| Chemical Name | TLV (ACGIH) | PEL (OSHA) | REL (NIOSH) |
|---------------|------------------------|------------|-------------|
| Quartz | 0.05 mg/m ³ | N/A | N/A |

Appropriate Engineering Controls: Adequate ventilation (local exhaust).

Individual Protection measures, such as PPE (Personal Protective Equipment):

| | |
|---------------------------------------|---------------------------------------|
| Personal Protection Equipment: | |
| Respiratory Protection: | Adequate ventilation (local exhaust). |

| | |
|---|--|
| Eye Protection: | Safety glasses/goggles. |
| Hand Protection: | No data. |
| Skin Protection: | Protective clothing, such as aprons recommended. |
| Thermal Protection: | No data. |
| General Safety and Hygiene Measures: | None listed. |
| Further Information: | No data. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|------------|
| Physical State/Appearance: | Liquid |
| Color: | Various |
| Odor: | Negligible |
| Odor Threshold: | Negligible |
| pH: | Unknown |
| Boiling Point/Range: | N/A |
| Melting Point/Range: | N/ |
| Flash Point: | N/A |
| Evaporation Rate: | N/A |
| Vapor Density: | N/A |
| Solubility(ies) in water: | No |
| Vapor Pressure: | N/A |
| Relative Density: | N/A |
| Viscosity: | N/A |
| Partition Coefficient (n-octanol/water), if applicable: | N/A |
| Explosive Properties: | None |
| Flammability: (Solid, gas) | Unknown |
| Flammability Limit in Air Upper/Lower | Unknown |
| Autoignition temperature: | N/A |
| Decomposition temperature: | None |

10. STABILITY AND REACTIVITY

| | |
|--|---------------------------------|
| Chemical Stability: | Stable under normal conditions. |
| Conditions to Avoid: | None |
| Incompatible Materials: | None |
| Hazardous Decomposition Products: | None |
| Possibility of Hazardous Reactions: | None |
| Reactivity: | None; considered stable. |
| Hazardous polymerization: | Will not occur. |

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

| | |
|---|-------------------------------|
| Eye Contact –Serious Eye Damage or Irritation | Could cause minor irritation. |
| Skin Contact – Skin Corrosion, Sensitization or Irritation: | No data. |
| Ingestion – Carcinogenicity/Aspiration Hazard: | No data. |
| Inhalation – Respiratory Sensitization/Toxicity: | No data. |
| Symptoms related to the physical chemical and toxicological characteristics: | No data. |
| Information on toxicological effects: | No data. |
| Delayed or Immediate effects: | No data. |
| Germ Cell Mutagenicity: | No data. |

| | | | |
|--|------------------|--------------------|-------------------------|
| Specific target organ toxicity (single exposure): | No data. | | |
| Specific target organ toxicity (repeated exposure): | No data. | | |
| Chemicals listed on NTP, IARC or OSHA as a Carcinogen?: | Quartz, Chromium | | |
| Chemical Name: | Oral LD50 | Dermal LD50 | Inhalation LC50 |
| Carboxymethylcellulose | 27,000 mg/kg | >2,000 mg/kg | 5,800 mg/m ³ |
| Cryolite | >5,000 mg/kg | >2,000 mg/kg | No data. |

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

12. ECOLOGICAL INFORMATION (NON-MANDATORY)

| | |
|--|-------------|
| Ecotoxicity: | Unknown. |
| Persistence and degradability: | Yes |
| Bioaccumulative potential: | Unknown. |
| Aquatic / Terrestrial warnings: | No data. |
| Mobility in soil: | Likely |
| Other adverse effects: | None known. |

13. DISPOSAL CONSIDERATIONS (NON-MANDATORY)

| | |
|------------------------------------|--|
| Disposal instructions: | Follow Local, State and Federal Regulations. |
| Local disposal regulations: | See above. |
| Hazardous waste code: | None |
| Contaminated packaging: | See above. |
| Waste residues: | No data. |

14. TRANSPORTATION INFORMATION (NON-MANDATORY)

| | DOT | IMDG | IATA |
|---|----------------|-------------|-------------|
| UN/ID number: | None | None | None |
| Proper shipping name: | None | None | None |
| Transport hazard class: | N/A | N/A | N/A |
| Packing group (if applicable): | None | None | None |
| Environmental Provisions: | None | None | None |
| Special Precautions: | None | None | None |
| Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code | No data. | | |
| Emergency Response Guide Number: No data. | EmS-No: | No data. | |

Pictograms

| | | |
|--------------------|----------------------------|----------------------------------|
| US: None | IATA; IMDG: None | Marine Pollutant: None |
|--------------------|----------------------------|----------------------------------|

15. REGULATORY INFORMATION (NON-MANDATORY)

| US Federal Regulations: | | | | | |
|--|------------|-------------------|------------------|---------------------------|---------------------------|
| TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): | | In compliance. | | | |
| CERCLA (Superfund) reportable quantity (lbs.) (40 CFR 302.4) | | No data. | | | |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): | | No data. | | | |
| Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): | | No data. | | | |
| Chemical | CAS | Reportable | Threshold | Threshold planning | Threshold planning |

| Name: | Number: | Quantity: | planning quantity: | quantity, lower value: | quantity, upper value: |
|--|--|-------------------------------|--------------------|------------------------|------------------------|
| None | X | X | X | X | X |
| Superfund Amendments and Reauthorization Act of 1986 (SARA) | | | | | |
| SARA 304 Emergency release notification: | | No data. | | | |
| SARA 311/312 (40 CFR 370) Hazardous Chemical: | | No data. | | | |
| SARA 313 (TRI reporting): | | <u>Chemical Name:</u> None | <u>CAS Number:</u> | <u>% by wt.</u> | |
| Drug Enforcement Administration (DEA) (21 CFR 1308.11-15): | | No data. | | | |
| Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): | | No data. | | | |
| Safe Drinking Water Act (SDWA): | | No data. | | | |
| Canadian Domestic Substances List (DSL): | | No data. | | | |
| State Regulations | | | | | |
| TSCA: | This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U.S. C. 2601 et. Seq. | | | | |
| FDA: | 21 CFR 175.105: No data. | | | | |
| SARA/Title III: | This product does not contain any substances at or above the reported threshold under Section 313, based on available data. | | | | |
| Conforms to Non-Toxic ASTM-4236: | Products 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). | | | | |
| California Proposition 65 Warning: | This product contains the following chemicals that are known to the State of California to cause cancer, birth defects, or other reproductive harm: Trace amounts of: Quartz, Titanium dioxide, Cobalt, Chromium. *No special warning is required under the provisions of CA Prop 65 during use.* | | | | |
| HMIS III Rating: | | | | | |

Unless a concentration is specified in Section 2 of the SDS, the above chemical(s) are present in trace amounts.

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

16. OTHER INFORMATION

The recommendations and information contained in this SDS have been compiled from sources believed to represent the most current information available when the SDS was prepared. However, the manufacturer / distributor of this product does not provide any warranty, guaranty of representation as to the correctness or sufficient of this information. If this material is used in large amounts and/or an unusual manner, the user is obliged to determine what safety measures are appropriate, including the applicable and relevant workplace and environmental regulations pertaining to handling, use and disposal.

| Creation Date: | Version: 2 | Revision date: |
|----------------|------------|----------------|
| 3/9/16 | 1 | |
| | 2 | 3/10/16-JL |
| | 3 | 10/27/17 – sp |
| | | |

END SAFETY DATA SHEET

| Table of Abbreviations | | | |
|------------------------|--|-----------------|---|
| ACGIH: | American Conference of Governmental Industrial Hygienists | LD: | Lethal Dose |
| ANSI: | American National Standards Institute | MARPOL: | Marine Pollution |
| ASTM: | American Society for Testing Materials | mg / kg: | Milligram per Kilogram |
| °C: | Degrees Centigrade | mm: | Millimeter |
| CAA: | Clean Air Act | MSHA: | Mine Safety and Health Administration |
| CAS: | Chemical Abstract Service | N/A: | Not Applicable |
| CERCLA: | Comprehensive Environmental Response, Compensation & Liability Act | NFPA: | National Fire Protections Association |
| CFR: | Code of Federal Regulations | NIOSH: | National Institute for Occupational Safety and Health |
| CPR: | Controlled Products Regulations | NTP: | National Toxicology Program |
| DEA: | Drug Enforcement Act | OEL: | Over Exposure Limit |
| DOT: | Department of Transportation | OSHA: | Occupational Safety and Health Administration |
| DSL: | Canadian Domestic Substances List | PEL: | Permissible Exposure Limits |
| EmS: | Emergency Medical Goods Services | ppm | Parts Per Million |
| EPA: | Environmental Protection Agency | SARA | Superfund Amendment and Reauthorization Act |
| °F: | Degrees Fahrenheit | STEL | Short-Term Exposure Limit |
| FDA: | Food & Drug Administration | SDS: | Safety Data Sheet |
| g/l: | Grams per Liter | SDWA: | Safe Drinking Water Act |
| HAPs: | Hazardous Air Pollutants | TLV: | Threshold Limit Value |
| Hg: | Mercury | TRI: | Toxics Release Inventory |
| HMIS: | Hazardous Materials Identification System | TSCA | Toxic Substances Control Act |
| HNOC: | Hazard(s) Not otherwise classified | TWA | Time – Weighted Average |
| IARC: | International Agency for Research on Cancer | U.N. | United Nations |
| IATA: | International Air Transport Association | WHMIS | Workplace Hazardous Materials Information System |
| ID: | Identification / Identity | > | Greater Than |
| IDLH: | Immediate Danger to Life or Health | < | Less Than |
| IMDG: | International Maritime Dangerous Goods | 73/78: | 1973 & 1978 |
| LC: | Lethal Concentration | | |