



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.duncan.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 Concepts Underglazes (all colors)
Product use/description: Non-toxic ceramic underglazes
Restrictions on use: None known

2. HAZARDS IDENTIFICATION

Classification:	This mixture does not meet criteria for classification.
Hazard statement:	Not applicable
Other hazards:	Not applicable
Signal word:	Not applicable
Precautionary statement:	Not applicable
Pictogram(s) by GHS:	Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

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

Products are made by physical manipulation and chemical reaction from the ingredients. These ingredient chemicals may not exist as the original formula in final products. None of these ingredients are hazardous substances.

Reportable ingredients (if applicable): The components are not hazardous and are below the required disclosure limits.

4. FIRST AID MEASURES

General advice:	First aid personnel must be aware of their own risk during rescue.
On inhalation:	Seek fresh air. Get medical attention if symptoms persist.
On skin contact:	Wash skin thoroughly with soap and water. If symptoms develop or persist, seek medical attention.
On eye contact:	Flush eyes with water as a precaution. Get medical attention if irritation develops or persists. Direct contact with eyes may cause temporary irritation.
On ingestion:	Drink 1-2 glasses of water. Get medical attention. Never give anything by mouth to an unconscious person.
Acute/delayed symptoms:	No data
Medical advice:	Treat symptomatically.
Symptoms / effects:	No data
Special treatment needed:	No data

5. FIREFIGHTING MEASURES

Extinguishing Media	
Suitable extinguishing media:	Product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media:	None known
Protection of Firefighters	
Specific hazards arising from the chemical:	None known
Protective equipment for firefighters:	Self-contained breathing apparatus and full protective clothing should be worn when fighting chemical fires. Selection of respiratory protection for firefighting: Follow the general fire precautions indicated in the workplace.
Special precautions for fire fighters:	None known
Will hazardous combustion occur?	Will not occur.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Keep unnecessary personnel away.
Environmental precautions:	Avoid discharge into drains, water courses, or onto the ground.
Methods for cleaning up:	Absorb spillage with suitable absorbent material. Collect and dispose of spillage as indicated in Section 13 of this SDS.
Recommended personal protective equipment:	See Section 8 of this SDS.

7. HANDLING AND STORAGE

Safe storage:	Store away from incompatible materials. Store in closed original container in a dry place. Storage temperature: between 4°C and 38°C. Protect from freezing.
Safe handling:	Avoid breathing mist/vapors/spray.
Known incompatibilities:	None known. Protect from freezing.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Occupational exposure limits: No exposure limit noted for ingredient(s).

Appropriate engineering controls: No special requirements under ordinary conditions of use and with adequate ventilation.

Individual protection measures, such as PPE (personal protective equipment):

Personal Protection Equipment:	
Respiratory protection:	Wear respiratory protection during operations where spraying or misting occurs.
Eye protection:	Risk of splashes. Wear approved safety glasses or goggles.
Hand protection:	Chemical-resistant gloves are recommended.
Skin protection:	No special precautions
Thermal protection:	No data
General safety and hygiene measures:	No specific hygiene procedures are noted, but good personal hygiene practices are always advisable, especially when working with chemicals.
Further information:	Avoid release into the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state/appearance:	Liquid
Color:	Various
Odor:	Odorless
Odor threshold:	N/A
pH:	7 – 10
Boiling point/range:	>100°C (>212°F)
Melting point/range:	1000°C (1832°F)
Flash point:	N/A
Evaporation rate:	1 (n-Butyl acetate = 1)
Vapor density:	N/A
Solubility(ies):	Miscible in water
Vapor pressure:	17.55 mm Hg 20°C
Relative density:	1.3 – 1.8
Viscosity:	N/A
Partition coefficient (n-octanol/water), if applicable:	No data available
Explosive properties:	N/A
Flammability: (solid, gas)	N/A
Flammability limit in air: upper/lower	N/A
Autoignition temperature:	No data
Decomposition temperature:	No data

10. STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions
Conditions to avoid:	Freezing
Incompatible materials:	None known
Hazardous decomposition products:	None known
Possibility of hazardous reactions:	Will not occur
Reactivity:	Stable under normal conditions
Hazardous polymerization:	Will not occur

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Eye contact – serious eye damage or irritation	Direct contact with eyes may cause temporary irritation.
Skin contact – skin corrosion, sensitization or irritation:	Prolonged contact with skin may cause dryness of the skin.
Ingestion – carcinogenicity/aspiration hazard:	No data
Inhalation – respiratory sensitization/toxicity:	No data available
Symptoms related to the physical chemical and toxicological characteristics:	No data
Information on toxicological effects:	None known
Delayed or immediate effects:	No data available
Germ cell mutagenicity:	No data available
Specific target organ toxicity (single exposure):	No data available
Specific target organ toxicity (repeated exposure):	No data available
Chemicals listed on NTP, IARC or OSHA as a	None listed

carcinogen:				
<u>Chemical Name:</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>	<u>Percentage</u>

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

12. ECOLOGICAL INFORMATION (NON-MANDATORY)

Ecotoxicity:	Not expected to be harmful to aquatic organisms
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Aquatic / terrestrial warnings:	No data available
Mobility in soil:	No data available
Other adverse effects:	No data available

13. DISPOSAL CONSIDERATIONS (NON-MANDATORY)

Disposal instructions:	Dispose of in accordance with local regulations.
Local disposal regulations:	Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.
Hazardous waste code:	None known. Waste codes should be assigned by the user based on the application for which the product was used.
Contaminated packaging:	Offer rinsed packaging materials to local recycling facilities.
Waste residues:	Do not discharge into drains, water courses or onto the ground.

14. TRANSPORTATION INFORMATION (NON-MANDATORY)

	<u>DOT</u>	<u>IMDG</u>	<u>IATA</u>
UN/ID number:	Not regulated	Not regulated	Not regulated
Proper shipping name:	Not applicable		
Transport hazard class:	N/A	N/A	N/A
Packing group (if applicable):	N/A	N/A	N/A
Environmental provisions:	No data	No data	No data
Special precautions:	No data	No data	No data
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
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15. REGULATORY INFORMATION (NON-MANDATORY)

U.S. Federal Regulations:	
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D):	Not regulated
CERCLA (Superfund) reportable quantity (lbs.) (40 CFR 302.4)	Not regulated
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):	Not regulated
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):	Not regulated

Chemical Name:	CAS Number:	Reportable Quantity:	Threshold planning quantity:	Threshold planning quantity, lower value:	Threshold planning 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> None	<u>% by wt.</u> None		
Drug Enforcement Administration (DEA) (21 CFR 1308.11-15):	No data				
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (Haps) List:	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				
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: none.				
HMIS III Rating:	Health=1, Flammability=0, Reactivity=0				
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 are 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 sufficiency 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.

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		

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