30454-1001 -1002

# **Non Toxic Glazes**

# Non Toxic Premixed & Dry Glazes North American Format

## **SECTION 1: COMPANY & PRODUCT IDENTIFICATION**

Prepared:	November 4, 2010	
Supersedes:	August 1, 2010	
Manufacturer:	Coloramics, LLC (D.B.A. Mayco Colors)	
	4077 Weaver Court South	
	Hilliard, Ohio 43026	
	United States of America	
	(614) 876-1171	

# IN CASE OF EMERGENCY PLEASE CONTACT YOUR REGIONAL POISON CONTROL CENTER

Product Identification: Ceramic Glazes

Product Usage: Glazing of ceramic ware

# Product Lines Covered by this Safety Data Sheet:

Astro Gems Textural Glazes	AS-510 through AS-548	
Classic Crackles	CC-101 through CC-108	
Clear Glaze	S-2101, C-300. S-2000. NT-CLR, SW-001. SD-001	
Crystalites Crystal Glazes	S-2701 through S-2732	
Crystalline Glazes	CR-100 through CR-301	
Elements	EL-101 through EL-134	
Elements Chunkies	EL-201 through EL-212	
Foundations	FN-001 through FN-306	
Jungle Gems (Unleaded Formulas)	CG-707NT through CG-974NT	

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One Strokes	OS-1 through OS-59	
Pottery Cascades	PC-601, PC-602, PC-603, PC-604	
Raku	RK-100 through RK-107	
Specialty Glazes	SG-101, SG-201, SG-202, SG-302	
Speckled Stroke & Coat	SP-201 through SP-279	
Stroke & Coat	SC-01 through SC-87	
Stoneware Glazes	SW-100 through SW-204, SW-001	
	SD-100 through SD-204, SD-001	
Stoneware Washes	SW-301 through SW-304	
Stroke & Coat Accents	SA-001, SA-002, SA-003	
Discontinued Products	OS-105, OS-136, OS-142, OS-147, OS-17, OS-18, OS-26, OS-38, OS-41, OS-48, OS-58, OS-60, OS-61, OS-62, OS-63, OS-9, PC-501, PC-502, PC-503, PC-504, PC-505, PS-551, PS-552, PS-553, PS-554, PS-555, S-2102, S-2103, S-2107, S-2109, S-2110, S-2111, S-2112, S-2113, S-2114, S-2115, S-2116, S-2117, S-2118, S-2119, S-2120, S-2121, S-2123, S-2126, S-2127, S-2128, S-2132, S-2133, S-2134, S-2136, S-2137, S-2138, S-2139, S-2140, S-2141, S-2142, S-2143, S-2144, S-2145, S-2146, S-2147, S-2148, S-2149, S-2150, S-2151, S-2152, S-2153, S-2154, S-2155, S-2159, S-2160, S-2161, S-2162, S-2163, S-2164, S-2165, S-2166, S-2167, S-2169, S-2171, S-2200, S-2201, S-2208, S-2209, S-2218, S-2220, S-2221, S-2223, S-2226, S-2227, S-2228, S-2229, S-2230, S-2231, S-2232, S-2234, S-2235, S-2236, S-2237, S-2238, S-2239, S-2243, S-2401, S-2402, S-2408, S-2421, S-2422, S-2423, S-2424, S-2425, S-2427, S-2560, S-2561, S-2562, S-2564, S-2565, S-2566, S-2574, S-2577, S-2578, S-2579, S-2580, S-2581, S-2582, S-2585, S-2587, S-2588, S-2589, S-2590, S-2591, S-2592, S-2593, S-2710, S-2717, S-2722, SG-102, SG-301, SG-303, SLG-17, SLG-2, SLG-6	

# SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS	% of Formula (Low to High)
Silica (Quartz)	14808-60-7	1% - 3%
Calcium Carbonate	471-34-1	0% - 3%
Frit (lead free)	65997-18-4	21% - 55%
Various Pigments	Confidential	Varies
Kaolin/Clay	1332-58-7	2% - 7%
Zinc Oxide	1314-13-2	0% - 1%

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Carboxymethylcellulose	9004-32-4	0% - 11/2%
Nepheline Syenite	37244-96-5	0% - 13%
Zirconium Silicate (Zr Si O <sub>4</sub> )	10101-57-7	0% - 7%
Water	7732-18-5	Varies

#### **SECTION 3: HAZARDS IDENTIFICATION**

Crystalline silica dust will be present when using dry mix products and may be present if unfired, dried glaze is excessively handled and allowed to create dust.

Mists from spraying may contain crystalline silica.

Route(s) of Entry: Inhalation, Ingestion; absorption through the skin is negligible.

Health Hazards (acute and chronic): Prolonged inhalation of silica, in excess of TLV, over an extended period of time may result in injury to the lungs.

## **SECTION 4: FIRST AID MEASURES**

- If inhaled: May cause irritation; remove from exposure
- If on skin: May cause irritation; wash skin with soap and water
- If in eyes: May cause irritation; flush eyes with large quantities of water for at least 15 minutes. If irritation persists after washing, contact a physician.
- If swallowed: Contact a physician.

# **SECTION 5: FIRE FIGHTING MEASURES**

Suitable Extinguishing Media

Special Hazards Arising From Chemical Fire

Special Protective Equipment and Precautions for Fire Fighters:

None

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled:

Personal Precautions, Protective Equipment and/or Emergency Procedures: None

Materials and Methods for Containment and Clean-Up: None

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#### **SECTION 7: HANDLING AND STORAGE**

## PRECAUTIONS FOR SAFE HANDLING AND USE:

- Ventilation: Local exhaust (if spray applying)
- Precautions for Safe Handling: None
- Conditions for Safe Storage, Including Incompatibilities: None

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients	OSHA PEL	ACGIH TLV
Silica (Si O <sub>2</sub> )	30 mg/m <sup>3</sup>	0.025mg/m <sup>3</sup>
Calcium Carbonate	15 mg/m <sup>3</sup>	N/A
Frit	N/A	N/A
Zirconium Silicate	N/A	N/A
Kaolin/Clay	N/A	N/A
Nepheline Syenite	N/A	N/A
Zinc Oxide	15 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>
Carboxymethylcellulose	N/A	N/A
Water	N/A	N/A

- Engineer Control: Adequate ventilation (local exhaust) if spray applied.
- Respiratory Protection: Use a NIOSH approved respirator if spray applying.
- Protective Gloves: Not normally needed.
- Eye Protection: Wear appropriate eye protection or safety glasses to keep dust out of eyes.
- Other Protective Clothing or Equipment: Wear appropriate clean, protective clothing such as, but not limited to, overalls, smocks, and aprons.
- Work/Hygienic Practices: Food, beverages, and smoking materials should not be in the work area. Hygiene is very important. Wash thoroughly before eating, drinking, smoking, or applying cosmetics.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: Colored and/or Clear Liquids

Odor/Odor Threshold:

PH:

N/A

Boiling Point:

N/A

Freezing point:

32°F

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Flash Point: N/A N/A Vapor Pressure: Vapor Density: N/A N/A Flammability: **Evaporation Rate:** N/A **Upper/Lower Explosive Limits:** None Partition Coefficient (n-octanol/water): None N/A Relative Density: N/A Solubility(ies): Decompositional Temperature: None N/A Viscosity: N/A Auto ignition temperature:

#### SECTION 10: STABILITY AND REACTIVITY

Reactivity: N/A
Chemical Stability: Stable
Possibility of Hazardous Reactions: None

Conditions to Avoid: Fumes from firing in kiln: Mist created from spray

application.

Incompatible Material: None Hazardous Decomposition or By-Products: N/A

## **SECTION 11: TOXICOLOGY INFORMATION**

Primary Route(s) of Entry: Dermal, Inhalation. The highest threat of inhalation exists during dispensing and mixing of dry products, excessive handling of dried, unfired glazed ware and/or during spray application.

# Additional information:

These mixtures contain silica, a know carcinogen. **Inhalation** is the only route of entry into the body that can cause Silicosis.

The water-based, premixed products and the dry mix products, when mixed with water, should be non-toxic during recommended use.

Pigments are various metals and metal compounds (may contain one or more of following: tin, iron, zirconium, zinc, cobalt. chromium (III) vanadium, praseodymium, aluminum, cadmium, copper, selenium, manganese).

The risk of exposure to these metals is minimal due to the low percentage used in the glaze formulas. Dermal exposure is negligible as these metals have poor dermal absorption. Inhalation exposure is increased with the use of dry mix products.

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Cobalt, and cadmium are considered animal carcinogen. Silica (quartz) is considered a human carcinogen.

Frits are fused silica glass like substances. The bioavailability is limited because of the physical nature of the frit.

These products conform to ASTM-4236 and have been certified by an independent, 3<sup>rd</sup> party toxicologist to be NON TOXIC.

#### **SECTION 12: ECOLOGICAL INFORMATION**

Mobility in Soil:

No

Persistence:

Yes

Bioaccumulation:

No

Ecotoxicity:

None

Other Adverse Effects:

None

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

Waste Residue/Disposal Methods: None

Safe Handling Information: None

#### SECTION 14: TRANSPORTATION INFORMATION

UN Shipping Name: N/A
UN Number: None

Environmental Hazard: None

Packing Group: None

Transportation Hazard Class: N/A

Special Precautions: None

## **SECTION 15: REGULATORY INFORMATION**

Silica (Quartz), Cobalt and Cadmium are listed by California, Proposition 65, as carcinogenic.

Silica (Quartz). Cobalt and Cadmium are listed on the IARC, OSHA or NTP carcinogen list.

All ingredients are on U.S. TSCA Inventory.

SARA Section 313: None

These products conform to ASTM-4236. Materials have been evaluated under the provisions of LHAMA (Labeling of Hazardous Art Material Act). Products listed on this SDS have been judged to be non-toxic and non-flammable under proposed use conditions. No special warning is required under provisions of LHAMA or California Proposition 65.

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# SECTION 16: ADDITIONAL INFORMATION

Mayco Glazes do not contain and products and/or ingredients derived from peanuts, eggs. milk, or wheat. Mayco Glazes do not contain latex.

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