

Nasco® Non-Toxic Glazes Containing Copper

SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION

Prepared: January 1, 2009
Supersedes: All previous
Manufacturer: Mayco Colors
Division of Coloramics, LLC
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Distributor Contacts:

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EC _____ Local Phone _____
Australia _____ Local Phone _____

IN CASE OF EMERGENCY PLEASE CONTACT YOUR LOCAL POISON CONTROL CENTER

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Nasco® Glazes S2156N, S2157N

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredients | CAS | ACGIH TLV | OSHA PEL |
|------------------|------------|--------------|-------------|
| Copper (oxide) | 1317-39-1 | 1.0 mg/M3 | 0.10mg/M3 |
| Silica | 14808-60-7 | 0.10mg/M3 | 0.10mg/M3 |
| Zinc | 7440-66-6 | NA | 5.0mg/M3 |
| Alumina Silicate | 1332-58-7 | NA | NA |
| Bentonite/Clay | 1302-78-9 | NA | NA |
| Water | 7732-18-5 | NA | NA |

SECTION 3: HAZARDS IDENTIFICATION

Contains Copper oxide based pigments.

Crystalline Silica may be present .

(OSHA PEL .1mg/m3)

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

Inhalation only if sprayed. Ingestion only if taken internally.

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.

Copper see section 11

SECTION 4: FIRST AID MEASURES

- If inhaled: Remove from exposure
- If on skin: Wash skin with soap and water
- If in eyes: Flush eyes with large quantities of water for at least 15 minutes. If irritation persists after washing, contact a physician.
- If swallowed: Dilute by drinking water

SECTION 5: FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARD DATA

Flash Point (method used): N/A

LEL: N/A

UEL: N/A

Flammable Limits: N/A

Extinguishing Media: None required - not combustible

Special Fire Fighting Procedures: None

Unusual Fire and Explosion Hazards: None

SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Uncontaminated material may be recovered and re-used. If contaminated, scoop, vacuum, or wash into a receptacle for disposal.

Waste Disposal Method: Follow Federal or State and Local regulations for disposal.

Testing of the waste may be required to determine status under the hazardous waste regulations.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING AND USE:

- Engineer Control - None
- Work practices- Store away from feed and food. Do not smoke, eat or drink while handling.
- Procedure/equipment: None
- Procedure for leaks or spills: Uncontaminated material may be recovered and reused. If contaminated, scoop, vacuum, or wash into a receptacle for disposal.
- Waste Disposal Method: Follow Federal or State and Local regulations for disposal.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Use of the following protective measures are strongly recommended if the glazes are to be applied by spraying. The Work/Hygienic Practices apply regardless of the method of application:

- Respiratory Protection (Specify Type): Use a NIOSH approved dust and/or fume respirator as necessary.
- Ventilation: Local Exhaust - for spraying
- Protective Gloves: N/A
- Eye Protection: for spraying
- 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: Various colors
- Odor and odor threshold: Negligible
- PH: Not available
- Boiling Point: None

- Vapor Pressure: N/A
- Vapor Density: N/A
- Melting Point: above 1000oF
- Specific Gravity (H2O=1): 1.4 to 1.6
- Flammable Limits: None
- Explosive limits: None
- Partition Coefficient: None
- Oxidizing Properties: None
- Solubility in Water: Negligible
- Percent Volatile by Volume: None
- Evaporation Rate: None
- Freezing point: N/A
- Flash Point: None
- Auto Ignition temperature: None:

SECTION 10: STABILITY AND REACTIVITY DATA

Incompatibility (material to avoid): As sold none, if copper oxide was removed from the glaze it is incompatible with aluminum (violent reaction when heated) lithium nitride and peroxyformic acid. Will corrode aluminum.

Stability: Stable (conditions to avoid: N/A)

Hazardous Decomposition or Byproducts: Not available

Hazardous Polymerization: Will not occur

Conditions to avoid: None.

SECTION 11: TOXICOLOGY INFORMATION

Hazard to Human: None during normal use. Harmful if inhaled, or ingested.

Product may contain silica and copper oxide.

If product is spray applied the following warnings apply: Warning: Contains Quartz.

1. Possible cancer agent based on tests with laboratory animals.
2. Exposure may cause lung damage.
3. Keep out of reach of children; avoid inhalation.

EFFECTS OF OVEREXPOSURE: Copper is slightly toxic. Inhalation of copper dust / fumes may cause acute irritation of the nose and/or trachea, may produce acute gastroenteric symptoms resulting in vomiting and/or inflammation, and/or may cause acute metal fume fever. Exposure of skin to copper dust may cause acute dermatitis. In the case of chronic exposure, the liver, kidneys and/or spleen may be injured, and/or anemia may develop. Chronic toxicity is confined to those persons suffering from pre-existing Wilsons Disease.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: The following medical conditions may be aggravated by exposure to copper dust:

1. Persons afflicted with chronic respiratory disease and/or impaired pulmonary functions, especially those with obstructive airway diseases.
2. Persons afflicted with pre-existing liver disease.
3. Persons afflicted with pre-existing kidney disease.
4. Persons afflicted with pre-existing skin disorders.
5. Persons afflicted with pre-existing blood disorders.
6. Persons afflicted with pre-existing Wilsons Disease.

PRIMARY ROUTE(S) OF ENTRY: Inhalation, Only if spray applied ---DO NOT SPRAY.

Ingestion. When heated copper compounds may give off copper fume which may cause symptoms similar to the common cold.

If ingested in large amounts gastrointestinal irritation may occur with salivation, nausea, vomiting, gastric pain, diarrhea and possible hemorrhagic gastritis.

Eye contact is irritating and may cause conjunctivitis.

SECTION 12: ECOLOGICAL INFORMATION

- Mobility: N/A
- Persistence/degradability: N/A
- Bioaccumulation: N/A
- Ecotoxicity: N/A

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Follow your Federal or State and Local regulations for disposal. Lead is listed in US-EPA Code of Federal Regulations 40, Part 261.24.

Testing of the waste may be required to determine status under the hazardous waste regulations.

Waste from residue/unused product: Can be landfilled according to local regulations. Contaminated packing: Can be landfilled according to local regulations.

SECTION 14: TRANSPORTATION INFORMATION

UN Number: None for this product.

SECTION 15: REGULATORY INFORMATION

Silica is listed by California , Proposition 65
Silica is listed on the IARC, OSHA or NTP carcinogen list.
All ingredients are on U.S. TSCA / EC / AICS / DSL Inventory.
See local requirements.

EU Status:
Symbol- None

WHMIS Status : Not Controlled
Chemical Inventory Status part 1

| | TSCA | EC | Japan | Australia |
|--------------------------|------|-----|-------|-----------|
| Copper Oxide (1317-39-1) | yes | yes | yes | yes |

Chemical Inventory Status part 2 Canada

| | Korea | DSL | NDSL | Phil. |
|--------------------------|-------|-----|------|-------|
| Copper Oxide (1317-39-1) | yes | yes | no | yes |

Federal , State and International Regulations Part 1

| | Sara 302 | Sara 313 | RQ TPQ LIST | Chem Catagory |
|--------------------------|----------|----------|-------------|---------------|
| Copper Oxide (1317-39-1) | No | No | No | Copper Cmpd |

Federal , State and International Regulations Part 2

| | CERCLA | RCRA | TSCA |
|--------------------------|--------|------|------|
| Copper Oxide (1317-39-1) | No | No | No |

Chemical Weapons Convention: No

SECTION 16: ADDITIONAL INFORMATION

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