



STONEWARE GLAZES

SAFETY DATA SHEET (SDS)

Version: 02

Date of Issue: October 31, 2023

According to: Regulation (EC) No. 1272/2008

Regulation (EC) No. 1907/2006

Section 1 – Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name:

STONEWARE GLAZES

Product Colors:

BLACK WALNUT (SW104), GREEN TEA (SW108), OLIVINE (SW127), MIRROR BLACK (SW132), AURORA GREEN (SW146), OLIVE FLOAT (SW151), SATIN PATINA (SW164), SAND & SEA (SW167), EMERALD (SW210), BLUE OPAL (SW252), COPPER WASH (SW304), RAINFOREST (SW185), LIGHT FLUX (SW401), DARK FLUX (SW402), ANTIQUE BRASS (SW182), OXBLOOD (SW183), SPECKLED TOAD (SW184), IVY (SW193) CLEAR (SW001), MATTE CLEAR (SW002), CRACKLE MATTE CLEAR (SW003), ZINC-FREE CLEAR (SW004), BLUE SURF (SW100), STONED DENIM (SW101), FROST BLUE (SW105), ALABASTER (SW106), DUNES (SW107), CAPRI BLUE (SW109), OYSTER (SW110), WROUGHT IRON (SW111), TIGER'S EYE (SW112), SPECKLED PLUM (SW113), MIDNIGHT RAIN (SW115), ROBIN'S EGG (SW116), HONEYCOMB (SW117), SEA SALT (SW118), CINNABAR (SW119), NORTHERN WOODS (SW120), SMOKE (SW121), MAYCOSHINO (SW122), SAPPHIRE (SW123), MATTE MAYCOSHINO (SW124), PURPLE MINT (SW125), CORDOVAN (SW128), COPPER FLOAT (SW129), COPPER JADE (SW130), BIRCH (SW131), COPPER ORE (SW133), EGGPLANT (SW134), WINTERGREEN (SW135), WEATHERED BLUE (SW136), STORM GRAY (SW137), LEMON MERINGUE (SW138), BLACK MATTE (SW140), WHITE MATTE (SW141), GRAY MATTE (SW142), ABALONE (SW143), LAVA ROCK (SW144), TEA DUST (SW145), MOONSCAPE (SW147), LIME SHOWER (SW148), CRACKLE WHITE (SW149), CELADON BLOOM (SW150), BLUE SPLATTERWARE (SW152), INGIDO RAIN (SW153), SHIPWRECK (SW154), WINTER WOOD (SW155), GALAXY (SW156), LILAC MATTE (SW158), BLUE MATTE (SW159), CHARTREUSE MATTE (SW160), YELLOW MATTE (SW161), PINK MATTE (SW162), SOFT RED MATTE (SW163), LAVENDER MIST (SW165), NORSE BLUE (SW166), CORAL SANDS (SW168), FROSTED LEMON (SW169), BLUE HYDRANGEA (SW170), ENCHANTED FOREST (SW171), MACADEMIA (SW172), AMBER QUARTZ (SW173), LEATHER (SW174), RUSTED IRON (SW175), SANDSTONE (SW176), RASPBERRY MIST (SW177), FOOL'S GOLD (SW178), TURQUOISE (SW201), ROOTBEER (SW203), AMBER TOPAZ (SW204), CORAL (SW205), MELON (SW206), CHAMBRAY (SW207), CHARCOL (SW209), GLACIER BLUE (SW211), PEACOCK (SW212), WHITE OPAL (SW250), PINK OPAL (SW251), GREEN OPAL (SW253), GRAY OPAL (SW255), IRON WASH (SW301), RUTILE WASH (SW302), MANGANESE WASH (SW303), COBALT WASH (SW305), WHITE MUDCRACK (SW403), BLACK MUDCRACK (SW404), LIGHT MAGMA (SW405), DARK MAGMA (SW406), WHITE GLOSS (SW501), YELLOW GLOSS (SW502), ORANGE GLOSS (SW503), RED GLOSS (SW504), PURPLE GLOSS (SW505), BRIGHT BLUE GLOSS (SW506), BRIGHT GREEN GLOSS (SW507), BLACK GLOSS (SW508), AZURITE (SW186), HIMALAYAN SALT (SW187), LANDSLIDE (SW188), CENOTE (SW189), MUDDY WATERS (SW179), DESERT DUSK (SW180), NIGHT MOTH (SW181), DARK GREEN GLOSS (SW509), BLUE GLOSS (SW510), PASSION FLOWER (SW190), PEPPERED PLUM (SW191), AMARYLLIS (SW192), NIMBUS (SW194), RIPTIDE (SW195), SAND DOLLAR (SW196), FOSSIL ROCK (SW197), ROSE QUARTZ (SW198), PINK GLOSS (SW511), CORAL GLOSS (SW512), BROWN GLOSS (SW513)

Product sizes: 4 fl. oz., 16 fl. oz. (1 pint), 128 fl. oz. (1 gallon)

Other Means of Identification
 Unique Formula Identifier: See product label
 Other: None known

Product Description: Liquid formulations intended to be used for arts and crafts purposes.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s): Use product for its intended purpose as a glaze product intended for arts and crafts purposes. This product is intended for small batch use.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Mayco Colors
 4077 Weaver Court South
 Hilliard, OH 43026

EU Contact:
 Business Phone: 614-675-1171
 Email: info@maycocolors.com

1.4 Emergency telephone number

Emergency Telephone: Contact the local poison control centre.

Section 2 – Hazard(s) Identification

2.1. Classification of the substance or mixture

According to: Regulation (EC) No 1272/2008 [CLP]

| | Health | Environment ^a | Physical |
|---|--|---|--------------------|
| Classification according to Regulation (EC) No 1272/2008 [CLP] | H371: Specific target organ toxicity (single exposure, Category 2, gastrointestinal tract) | H400: Hazardous to the aquatic environment - short term (acute) hazard (Category 1) H410: Hazardous to the aquatic environment - long term (chronic) hazard (Category 1) | Not classified |
| SCL and/or M-factor | Not applicable | Not applicable | Not applicable |
| Classification Procedure | Weight of evidence | Weight of evidence | Weight of evidence |

^a This SDS applies to the product line, as such the environmental classifications listed do not pertain to all colors. It should be noted that some colors may present environmental concerns to a lesser degree (*i.e.*, Category 2, 3 or 4) and some colors may present no concerns.

2.2. Label elements

Label Pictogram:



Signal Word: Warning

Hazard statements & Precautions:

Specific target organ toxicity (single exposure, Category 2, gastrointestinal tract) (H371)

May cause irritation to gastrointestinal tract through oral exposure.

P260: Do not breathe the mist/vapour/spray.

P264: Wash hands thoroughly after handling.

**Acute aquatic toxicity
(Category 1) (H400)
Chronic aquatic toxicity
(Category 1) (H410)**

P270: Do not eat, drink or smoke when using this product.
P308 + P316: IF exposed or concerned: Get emergency medical help immediately.
P405: Store locked up.
P501: Dispose of contents/container in accordance with local/regional/national/and/or international regulations.
Very toxic to aquatic life with long lasting effects.
P273: Avoid release to the environment.
P391: Collect spillage.
P501: Dispose of contents/container in accordance with local, regional, national, and/or international regulation.

Supplemental Hazard Information:

- EUH208: Contains 1,2-benzisothiazolin-3-one (CAS No. 2634-33-5). May produce an allergic reaction.

2.3. Other hazards

- This product is not expected to be endocrine disrupting.
- This product is not expected to meet the criteria for vPvB or PBT in accordance with Regulation (EC) No. 1907/2006, Annex XIII.
- No other hazards have been identified for this product.

Section 3 – Composition / Information on Ingredients

3.1 Substances

The product is a mixture and not a substance.

3.2 Mixture

| Chemical Name | CAS No. | EC No. | % Concentration ^a | GHS Hazards ^b |
|--------------------------------|------------|-----------|------------------------------|---|
| Quartz (crystalline silica) | 14808-60-7 | 238-878-4 | up to 31.9813% | H350: Carcinogenicity (Category 1) (Inhalation); H372: Specific target organ toxicity (repeated exposure, Category 1, lungs) |
| Cupric oxide | 1317-38-0 | 215-269-1 | up to 21.1984% | H371: Specific target organ toxicity (single exposure, Category 2, gastrointestinal tract); H400: Hazardous to the aquatic environment - short term (acute) hazard (Category 1); H410: Hazardous to the aquatic environment – long term (chronic) hazard (Category 1) |
| Cobalt (II, III) oxide | 1308-06-1 | 215-157-2 | up to 14.79354% | H334: Respiratory sensitization (Category 1B); H412: Hazardous to the aquatic environment – long term (chronic) hazard (Category 3) |
| Titanium dioxide | 13463-67-7 | 236-675-5 | up to 0.9138% | H351: Carcinogenicity (Category 2) (Inhalation) |
| Zinc oxide | 1314-13-2 | 215-222-5 | up to 8.6029% | H371: Specific target organ toxicity (single exposure, Category 2, gastrointestinal tract); H400: Hazardous to the aquatic environment – short term (acute) hazard (Category 1); H410: Hazardous to the aquatic environment – long term (chronic) hazard (Category 1) |
| Manganese dioxide | 1313-13-9 | 215-202-6 | up to 24.4881% | H302: Acute toxicity - oral (Category 4); H332: Acute toxicity - inhalation (Category 4) |
| Lithium carbonate | 554-13-2 | 209-062-5 | up to 2.7752% | H302: Acute toxicity - oral (Category 4); H319: Eye irritation (Category 2) |

| | | | | |
|-------------------------------|------------|-----------|----------------|--|
| Boron oxide ^c | 1303-86-2 | 215-125-8 | up to 1.8276% | H360FD: Reproductive toxicity (Category 1B; may damage fertility or the unborn child) |
| Feldspar | 68476-25-5 | 270-666-7 | up to 25.7005% | H335: Specific target organ toxicity (single exposure, Category 3, respiratory irritation); H319: Eye Irritation (Category 2) |
| Trisodium hexafluoroaluminate | 13775-53-6 | 237-410-6 | up to 7.4272% | H332: Acute toxicity - inhalation (Category 4); H372: Specific target organ toxicity (repeated exposure, Category 1, lungs); H411: Hazardous to the aquatic environment – long term (chronic) hazard (Category 2) |
| Zinc pyrithione | 13463-41-7 | 236-671-3 | up to 0.0078% | H301: Acute toxicity - oral (Category 3); H318: Eye damage (Category 1); H330: Acute toxicity – inhalation (Category 2); H372: Specific target organ toxicity (repeated exposure, Category 1); H360D: Reproductive toxicity (Category 1B) (May damage the unborn child) H401: Acute aquatic toxicity (Category 1); H411: Chronic aquatic toxicity (Category 1) |

- ^a Concentrations are calculated as a maximum across all products, rather than by color.
- ^b GHS classifications are based on classifications in the CLP as well as available toxicology data regarding the individual ingredients.
- ^c The hazardous boron listed as part of this product is completely incorporated into the glassy structure of the frit, chemically reacted in the form of silicates or other essentially insoluble complexes. Exposure to the hazardous ingredient can occur if the ingredients dissolve out of the glass. Because of the chemical stability of frits and its resistance to attack by acids or alkali, this is anticipated to occur very slowly. To date, there is no significant evidence of adverse effects from industrial exposures.

The other ingredients in the product are either considered non-hazardous or are below their respective GHS cut-off values/concentration limits in the final product and were therefore not disclosed in the SDS.

It should be noted that the product may contain quartz (CAS No.14808-60-7) and titanium dioxide (CAS No. 13463-67-7) which may be hazardous when inhaled. Given the nature and physical form of the product (*i.e.*, liquid glaze) airborne respirable particles would not likely be released from the product and therefore the hazard is not relevant to the product.

Assessment of this product was based on the assumption that the glaze will not be sanded after it has been fired in the kiln.

| | Specific Concentration Limit | Multiplying-Factor | Acute Toxicity Estimate |
|-------------------------|------------------------------|--------------------|--|
| STONEWARE GLAZES | N/A | N/A | >2000 mg/kg (oral/dermal) >20 mg/L (inhalation) |

Section 4 – First Aid Measures

4.1 Description of first aid measures

Eye contact: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and immediately flush eyes with water. Seek medical attention if in doubt.

Skin contact: No specific first aid measures are required. If irritation occurs, wash with plenty of water and soap. Take off contaminated clothing. If skin irritation persists: Seek medical attention if in doubt.

Inhalation: No specific first aid measures are required. Inhalation route of exposure is not anticipated with intended use. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Seek medical attention if in doubt.

Ingestion: No specific first aid measures are required. Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention if in doubt.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to **Section 11 - Toxicological Information**.

4.3 Indication of any immediate medical attention and special treatment needed

- Not required

Section 5 – Fire Fighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media: Use extinguishing media suitable for surrounding area if material is involved in a fire (e.g., water fog, water spray, foam, dry chemical or carbon dioxide).

Unsuitable Extinguishing Media: None known

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products:

- Irritating vapours or fumes may form if product is involved in fire:
- See also **Section 10 - Stability and Reactivity**.

5.3 Advice for firefighters

- Wear a self-contained breathing apparatus to protect against potentially irritating vapours or fumes.

Section 6 – Accidental Release Measures

6.1 Personal precautions, protective equipment (PPE) and emergency procedures

Personal Precautions: Ventilate area if spilled in confined space or other poorly ventilated areas. Observe PPE advice in **Section 8 – Exposure Controls/Personal Protection**.

Emergency Procedures: Evacuate personnel to safe areas.

6.2 Environmental precautions

- Prevent entry and contact with soil, drains, sewers, and waterways. Inform relevant local/regional/national/international authorities. Prevent further leakage or spillage if it is safe to do so.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures: Contain spill if safe to do so. Collect recoverable product and place in a designated container for recycle and/or disposal. Ventilate contaminated area thoroughly. Dispose of contents/container in accordance with local/regional/national/international regulations.

6.4 Reference to other sections

- Refer to **Section 8 - Exposure Controls/Personal Protection** and **Section 13 – Disposal Considerations**.

Section 7– Handling and Storage

7.1 Precautions for safe handling

- Wash hands thoroughly after handling.
- Wash contaminated clothing before reuse.
- Employees should be trained in the safe use and handling of chemical materials.
- Refer to **Section 8 – Exposure Controls/Personal Protection**

7.2 Conditions for safe storage, including any incompatibilities

- Keep container tightly closed to avoid spills.
- Keep in a cool dry place.

7.3 Specific end use(s)

- Refer to **Section 1.2 – Relevant identified uses.**

Section 8– Exposure Controls / Personal Protection

8.1 Control Parameters:

Occupational exposure limits: Only vapours were considered to be foreseeable under conditions of normal use. Airborne particles, such as dust, are not foreseeable under conditions of normal use.

| Chemical Name | CAS No. | ACGIH TLVs TWA | OSHA PELs TWA | NIOSH RELs TWA | DFG MAK TWA |
|---|------------|--|---|--|--------------------------------------|
| Quartz (crystalline silica) | 14808-60-7 | 0.025 mg/m ³ R | 0.05 mg/m ³ | 0.05 mg/m ³ | N/A |
| Titanium dioxide | 13463-67-7 | 10 mg/m ³ | 15 mg/m ³ ^a | N/A | 0.3 mg/m ³ ^b R |
| Boron oxide | 1303-86-2 | 10 mg/m ³ ^a | 15 mg/m ³ ^a | 10 mg/m ³ ^a | N/A |
| Zinc oxide | 1314-13-2 | 2 mg/m ³ R | 15 mg/m ³ ^a 5 mg/m ³ ^b | 5 mg/m ³ (dust only) | 0.1 mg/m ³ R |
| Cupric oxide | 1317-38-0 | 1 mg/m ³ (dusts & mists) | 15 mg/m ³ (dusts & mists) | 1 mg/m ³ (except fume) | N/A |
| ^a Total ^b Respirable | | | R N/A | Measured as respirable fraction of the aerosol Not applicable | |

8.2 Exposure Controls:

Appropriate engineering controls

- No special requirements under ordinary conditions of use and with adequate ventilation. Mechanical ventilation or local exhaust ventilation may be required.

8.3 Personal Protective Equipment

Note: Consider the concentration and amount of product at the workplace when selecting PPE. Use protective equipment as required.

Respiratory: Under normal conditions of use, a respirator is not usually required. Use appropriate respiratory protection when handling to minimize exposure to vapours. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.

Eyes/Face: If contact is likely, safety glasses with side shields are recommended. An eyewash bottle or station should be available in the workplace. Wear a face shield if splash or spray is likely.

Hands: Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur, wear chemically protective gloves.

Body/Skin: Wear chemically impervious gloves, coveralls, apron, boots as necessary to minimize contact. Do not wear rings, watches or similar apparel that could entrap the material.

Thermal Hazards: None known

Environmental Exposure Controls:

Not available

Hygiene measures:

Observe good industrial hygiene practices. Avoid contact with skin. Contaminated work clothing should not be allowed out of the workplace and should be washed before reuse. When using the product do not eat, drink or smoke.

Section 9 – Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Note: The data below are typical values and do not constitute a specification.

| | | | |
|---|-----------------------------------|--|--------------------------------|
| Appearance: Physical state: Color: Odor: | Liquid See section 1.1 None | Partition Coefficient n-octanol/water: Auto-ignition temperature: | Not available Not available |
| pH (as supplied): | 8 - 9 | Decomposition temperature: | Not available |
| Freezing point: | 32°F | Dynamic viscosity: | Not available |
| Boiling point: | 100°F | Molecular weight: | Not available |
| Flash point: | Not available | Taste: | Not available |
| Evaporation rate: | Not available | Explosive properties: | Not available |
| Flammability: | Not available | Oxidizing properties: | Not available |
| Upper/lower explosive limits: | Not available | Surface tension: | Not available |
| Vapor pressure: | Not available | Volatile component: | Not available |
| Water solubility: | Not available | Gas group: | Not available |
| Vapor density (Air = 1): | Not available | pH (as solution): | Not available |
| Specific gravity (Water = 1): | Not available | VOC: | Not available |
| Relative density: | Not available | Particle size range: | Not available |

9.2.1 Information with Regard to Physical Hazard Classes

| | |
|--|---------------|
| Explosives | Not available |
| Flammable gases | Not available |
| Aerosols | Not available |
| Oxidising gases | Not available |
| Gases under pressure | Not available |
| Flammable liquids | Not available |
| Flammable solids | Not available |
| Self-reactive substances and mixtures | Not available |
| Pyrophoric liquids | Not available |
| Pyrophoric solids | Not available |
| Self-heating substances and mixtures | Not available |
| Substances and mixtures, which emit flammable gases in contact with water | Not available |
| Oxidising liquids | Not available |
| Oxidizing solids | Not available |
| Organic peroxides | Not available |
| Corrosive to metals | Not available |
| Desensitised explosives | Not available |

9.2.2 Other Safety Characteristics

| | |
|---|---------------|
| Mechanical sensitivity | Not available |
| Self-accelerating polymerisation temperature | Not available |
| Formation of explosible dust/air mixtures | Not available |
| Acid/alkaline reserve; (e) evaporation rate | Not available |
| Miscibility | Not available |
| Conductivity | Not available |
| Corrosiveness | Not available |
| Gas group | Not available |
| Redox potential | Not available |
| Radical formation potential | Not available |
| Photocatalytic properties | Not available |

Section 10 – Stability and Reactivity

10.1 Reactivity

- This material is not considered to be reactive under normal handling and storage conditions.

10.2 Chemical stability

- This material is considered stable under normal handling and storage conditions.

10.3 Possibility of hazardous reactions

- Not expected to occur under normal handling and storage conditions.

10.4 Conditions to avoid

- Exposure to high temperatures
- Strong acids
- Strong bases
- Strong oxidisers

10.5 Incompatible materials

- Strong acids
- Strong bases
- Strong reducing agents
- Strong oxidizing agents

10.6 Hazardous decomposition products

- Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion. Irritating and toxic substances may be emitted upon combustion, burning, or decomposition of dry solids.

Section 11 – Toxicological Information

11.1. Information on hazard classes:

Likely routes of exposure: Skin/eye contact, inhalation of vapors.

Potential signs and symptoms:

| | |
|-----------------------------------|--|
| Acute oral toxicity: | Manganese dioxide (CAS No. 1313-13-9) and lithium carbonate (CAS No. 554-13-2) have been classified for acute oral toxicity (Category 4) and zinc pyrithione (CAS No. 13463-41-7) has been classified for acute oral toxicity (Category 3); however, the product is practically nontoxic based on available animal and human use data. The oral ATE for the whole product is >2000 mg/kg. |
| Acute dermal toxicity: | The product is practically non-toxic based on available animal and human use data. The dermal ATE for the whole product is >5000 mg/kg. |
| Acute inhalation toxicity: | Manganese dioxide (CAS No. 1313-13-9) and trisodium hexafluoroaluminate (CAS No. 13775-53-6) have been classified for acute inhalation toxicity (Category 4) and zinc pyrithione (CAS No. 13463-41-7) has been classified for acute inhalation toxicity (Category 2); however, the product is practically non-toxic based on available animal and human use data. The inhalation ATE for the whole product is >5 mg/L. |
| Skin corrosion/irritation: | The ingredients in this product >1% are not corrosive to the skin or skin irritants based on human and/or animal studies. |

| | |
|--|--|
| Serious eye damage/irritation: | Feldspar (CAS No. 68476-25-5) and lithium carbonate (CAS No. 554-13-2) have been classified for eye irritation (Category 2). Product classification is not warranted for eye irritation based on a review of available data. The other ingredients in this product >1% are not damaging to the eyes or eye irritants based on human and/or animal studies. |
| Respiratory or skin sensitization: | Cobalt (II, III) oxide (CAS No. 1308-06-1) has been classified for respiratory sensitization (Category 1B). Product classification is not warranted for respiratory sensitization based on a review of the available data and the form of cobalt present in the product (<i>i.e.</i> , cobalt is bound to a matrix/complex which reduces the availability of cobalt in the body). The other ingredients in this product >0.1% are not sensitizing to the skin or respiratory system based on human and/or animal studies. |
| Mutagenicity: | The ingredients in this product >0.1% are not mutagenic based on animal studies or no data identified for the components in this product. |
| Carcinogenicity: | Quartz (crystalline silica) (airborne, unbound particles of respirable size) (CAS No. 14808-60-7) has been classified for carcinogenicity (Category 1). Quartz (crystalline silica) [listed as silica dust, crystalline, in the form of quartz or cristobalite (CAS No. 14808-60-7)] is listed as a carcinogen by IARC, NTP and ACGIH. Titanium dioxide (airborne, unbound particles of respirable size) (CAS No. 13463-67-7) has been classified for carcinogenicity (Category 2). Titanium dioxide (airborne, unbound particles of respirable size) (CAS No. 13463-67-7) is listed as a carcinogen by IARC and ACGIH. Product classification is not warranted for carcinogenicity based on nature of the product (<i>i.e.</i> , liquid glaze). The other ingredients in the product >0.1% are not carcinogenic based on animal studies or no data identified for the components in this product. |
| Reproductive Toxicity: | Boron oxide (CAS No. 1303-86-2) has been classified for reproductive toxicity (Category 1B; may damage fertility or the unborn child). Product classification is not warranted given that the hazardous boron is completely incorporated into the glassy structure of the frit (chemically reacted in the form of silicates or other essentially insoluble complexes). Zinc pyrithione (CAS No. 13463-41-7) has been classified for reproductive toxicity (Category 1B; may damage fertility or the unborn child). Product classification is not warranted for this effect given the concentration of zinc pyrithione in the product. The other ingredients in this product >0.1% are not reproductive toxicants based on animal studies, or no data identified for the components in this product. |
| Specific target organ toxicity (single exposure): | Cupric oxide (CAS No. 1317-38-0) has been classified for specific target organ toxicity (single exposure, Category 2; may cause irritation to the gastrointestinal tract through oral exposure). Zinc oxide (CAS No. 1314-13-2) has been classified for specific target organ toxicity (single exposure, Category 2; may cause irritation to the gastrointestinal tract through oral exposure). Product classification is warranted for gastrointestinal irritation given the concentration of cupric oxide and zinc oxide in the product and a review of available data. Feldspar (CAS No. 68476-25-5) has been classified for specific target organ toxicity (single exposure, Category 3; may cause respiratory irritation). Product classification is not warranted for this effect based on a review of available data and the nature of the product (<i>i.e.</i> , liquid glaze). The other ingredients in this product >1% are not single exposure specific target organ toxicity (single exposure) hazards based on animal studies or no data identified for the components in this product |
| Specific target organ toxicity (repeated exposure): | Quartz (crystalline silica) (CAS No. 14808-60-7) has been classified for specific target organ toxicity (repeated exposure, Category 1; causes damage to lungs through prolonged or repeated exposure <i>via</i> inhalation). Product classification is not warranted for this effect given the nature of the product (<i>i.e.</i> , liquid glaze). Zinc pyrithione (CAS No. 13463-41-7) and trisodium hexafluoroaluminate (CAS No. 13775-53-6) have been classified for specific target organ toxicity (repeated exposure, Category 1; causes damage to lungs through prolonged or |

repeated exposure). Product classification is not warranted for this effect given the concentration of zinc pyrethrin and trisodium hexafluoroaluminate in the product. The other ingredients in this product >1% are not repeated exposure specific target organ toxicity hazards based on available information, human and/or animal studies.

Aspiration hazard:

The ingredients in this product >1% are not aspiration hazards based on animal studies or no data identified for the components in this product.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

- This product is not expected to be endocrine disrupting,

11.2.2 Information on other hazards

- No other hazards to note.

References:

ECHA (European Chemicals Agency). 2023. REACH Registered Substances Database. <https://echa.europa.eu/search-for-chemicals>
 IARC (International Agency for Research on Cancer). 2023. Agents Classified by the IARC Monographs, Volumes 1–129. <https://monographs.iarc.who.int/list-of-classifications/>
 NTP (National Toxicology Program). 2021. Report on Carcinogens, Fifteenth Edition.; Research Triangle Park, NC: U.S. Department of Health and Human Services, Public Health Service. <https://ntp.niehs.nih.gov/go/roc15>
 Official Journal of the European Union. 2008. Regulation (EC) No 1272/2008. <http://data.europa.eu/eli/reg/2008/1272/2022-03-01>

Section 12 – Ecological Information

12.1 Toxicity

- Product is classified for acute and chronic aquatic toxicity (Category 1).

| Chemical Name | CAS No. | Species | Result |
|-------------------------------|------------|----------------------------------|--|
| Zinc oxide | 1314-13-2 | <i>Danio rerio</i> | LC ₅₀ (96h): 1.793 mg/L (bulk ZnO) nominal EC ₅₀ (84h): 2.066 mg/L (bulk ZnO) nominal |
| | | <i>Danio rerio</i> | NOEC (32d): ≥540 µg/L nominal |
| | | <i>Daphnia magna</i> | EC ₅₀ (48h): >1.4 - <2.5 mg/L nominal |
| | | <i>Daphnia magna</i> | EC ₁₀ (21d): 127 µg/L nominal EC ₁₀ (21d): 195 µg/L nominal |
| Cupric oxide | 1317-38-0 | <i>Fathead minnow</i> | LC ₅₀ (96h): 38.4 µg/L – 256.2 µg/L |
| | | <i>Daphnia magna</i> | NOEC (32d): 188 µg Cu/L |
| | | <i>Raphidocelis subcapitata</i> | NOEC (48h): 1 µg/L - 35 µg/L |
| | | <i>Lemna minor</i> | NOEC (7d): 30 µg/L |
| Cobalt (II, III) oxide | 1308-06-1 | <i>Oncorhynchus mykiss</i> | LC ₅₀ = 0.8 mg Co/L |
| | | <i>Danio rerio</i> | LC ₅₀ = 85 mg Co/L |
| | | <i>Cladoceran</i> | LC ₅₀ = 0.61 mg Co/L |
| | | <i>Lemna minor</i> | EC ₅₀ = 52 µg/L |
| Zinc pyrethrin | 13463-41-7 | <i>Pimephales promelas</i> | LC ₅₀ (96h): 0.0026 mg/L NOEC (96h): 0.011 mg/L |
| | | <i>Daphnia magna</i> | LC ₅₀ (48h): 0.0082 mg/L NOEC (48h): 0.011 mg/L |
| | | <i>Selenastrum capricornutum</i> | EC ₅₀ (120h): 0.028mg/L NOEC (120h): 0.0078 mg/L |
| Trisodium hexafluoroaluminate | 13775-53-6 | <i>Brachydanio rerio</i> | LC ₅₀ (96h): 99 mg/L |
| | | <i>Daphnia magna</i> | EC ₅₀ (48h): 156 mg/L |
| | | <i>Pseudokirchneriella</i> | ErC ₅₀ (72h): 8.8 mg/L |

12.2 Persistence and degradability

- No data available for the product.

12.3 Bioaccumulative potential

- The ingredient, cobalt (II, III) oxide (CAS No. 1308-06-1) has a bioconcentration factor of 180 – 4000.

12.4 Mobility in Soil

- No data available for the product.

12.5 Results of PBT and vPvB assessment

- No data available for the product.

12.6 Endocrine disrupting properties

- No data available for the product.

12.7 Other adverse effects

- No further data available.

References:

ECHA (European Chemicals Agency). 2023. REACH Registered Substances Database.
<https://echa.europa.eu/search-for-chemicals>

Section 13 – Disposal Considerations

13.1 Waste treatment methods

Preparing wastes for disposal: Use product for its intended purpose or recycle if possible. Dispose of waste in accordance with local, regional, national, and/or international regulations. The empty container has residues which may exhibit hazards of the product.

Contaminated Packaging: Container packaging may exhibit hazards.

Section 14 – Transport Information

Note: This product is regulated as dangerous goods for transport.

| | |
|---|--|
| 14.1 UN number | 3082 |
| 14.2 UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| 14.3 Transport hazard class(es): | 9 |
| 14.4 Packing group | III |
| 14.5 Environmental hazards | Acute and Chronic |
| 14.6 Special precautions for user | 274, 335, 601 |
| 14.7 Maritime transport in bulk according to IMO instruments | If the product is transported in bulk, the regulations are applied to the product. |

Section 15 – Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Note: The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in **Section 3 – Composition / Information on Ingredients**.

European Union

Seveso Directive (2012/18/EU): Methanol (CAS No. 67-56-1) is listed in Annex I, Part 2 as a named dangerous substance with a lower tier requirement of 500 tonnes and an upper tier requirement of 5000 tonnes. No other ingredients in this product are listed.

Regulation (EC) No. 1005/2009, Annex I and II: The ingredients in this product are not listed.

Regulation (EC) No. 649/2012, Annex I, Parts I-III: The ingredients in this product are not listed.

Regulation (EC) No. 2019/1021, Annex I: The ingredients in this product are not listed.

Germany:

Wassergefährdungsklasse (water hazard class): WGK 3 – Schwach wassergefährdend (severe hazard to waters).

International:

IARC: Quartz (crystalline silica) (CAS No. 14808-60-7) is listed in Group 1, carcinogenic to humans. Titanium dioxide (CAS No. 13463-67-7) is listed in Group 2B, possibly carcinogenic to humans. Cobalt oxide (CAS No. 1308-06-1) (listed as cobalt (II, III) oxide), is classified as Group 3, not classifiable as to its carcinogenicity to humans. No other ingredients in this product are classified with respect to carcinogenicity.

15.2 Chemical Safety Assessment

- None available for the components in this product.

Section 16 – Other Information

List of acronyms and abbreviations:

| | |
|---|---|
| ACGIH: American Conference of Governmental Industrial Hygienists | NTP: National Toxicology Program |
| ATE: Acute Toxicity Estimate | OSHA: Occupational Safety and Health Administration |
| CAA: Clean Air Act | PBT: Persistent, Bioaccumulative and Toxic |
| CAS: Chemical Abstract Service Number | PEL: Permissible Exposure Level |
| CERCLA: Comprehensive Environmental Response and Liability Act | PPE: Personal Protective Equipment |
| CWA: Clean Water Act | REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals |
| DFG MAK: Deutsche Forschungsgemeinschaft Maximale Arbeitsplatzkonzentration | REL: Recommended exposure level |
| EC: European Commission | SARA: Superfund Amendment and Reauthorization Act |
| ECHA: European Chemicals Agency | SDS: Safety Data Sheet |
| GHS: Global Harmonized System | TLV: Threshold limit value |
| IARC: International Agency for Research on Cancer | TSCA: Toxic Substances Control Act |
| IMO: International Maritime Organization | TWA: Time-weighted average |
| MARPOL: Maritime Pollution | UN: United Nations |
| N/A: Not applicable | VOC: Volatile Organic Compound |
| NIOSH: National Institute for Occupational Safety & Health | vPvB: very Persistent, very Bioaccumulative |

References:

ECHA (European Chemicals Agency). 2023. REACH Registered Substances Database.

<https://echa.europa.eu/search-for-chemicals>

IARC (International Agency for Research on Cancer). 2023. Agents Classified by the IARC Monographs, Volumes 1-129. <https://monographs.iarc.who.int/list-of-classifications/>

NTP (National Toxicology Program). 2021. Report on Carcinogens, Fifteenth Edition.; Research Triangle Park, NC: U.S. Department of Health and Human Services, Public Health Service. <https://ntp.niehs.nih.gov/go/roc15>

Official Journal of the European Union. 2008. Regulation (EC) No 1272/2008.

<http://data.europa.eu/eli/reg/2008/1272/2022-03-01>

Disclaimer:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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