



# Safety Data Sheet (SDS)

GHS - United States

## Section 1 - Identification

Product Name	CMW Custom Glaze — Thundercloud, Batch #thunderc
Product Code	CMW-thunderc
Common Names	Ceramic glaze, dry powder glaze mixture
Company / Manufacturer	Ceramic Materials Workshop (CMW) PO Box 223 Epsom, NH 03234 (347) 878-2529 info@ceramicmaterialsworkshop.com
Emergency Number	911
Product Use	Ceramic glaze for pottery, artware, ceramic surfaces
Restrictions on Use	Not for spray application without appropriate respiratory protection. Not recommended for use on food-contact surfaces unless covered with a food-safe clear glaze and fired to the recommended temperature.

## Section 2 - Hazard Identification

GHS Label Elements /  
Hazard Pictograms



OSHA/HCS Status	Glaze mixture in dry powder form is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Product is shipped as a dry powder. Respirable dust may be generated during handling, weighing, and mixing. Appropriate dust controls and respiratory protection are required.
Classification of the substance or mixture	Carcinogenicity (inhalation) - Category 1A Specific Target Organ Toxicity (Repeated Exposure) (Respiratory tract through inhalation) - Category 1
Signal Word	Danger
Hazard Statements	(H350) Cancer hazard. Contains quartz (crystalline silica) which may cause cancer. Risk of cancer depends upon duration and level of exposure to the dust. Not an acute hazard. (H372) Prolonged inhalation of dust may cause lung injury. Inhalation of high concentrations of dust may cause mechanical irritation and discomfort of the respiratory tract. Repeated exposure may have chronic effects. (H316 + H320 + H335) Can cause skin, respiratory, and eye irritation.
Precautionary Statements	(I) Contains Crystalline Silica $\geq 1\%$ Respirable (P201) Obtain special instructions before use. (P280) Wear protective gloves/protective clothing/eye protection/face protection. (P308+P313) IF exposed or concerned: Get medical advice/attention. (P405) Store locked up. (P501) Dispose of contents/container in accordance with local regulations. (P261) Avoid breathing dust/spray. (P262) Do not get in eyes, on skin, or on clothing. (P264) Wash hands thoroughly after handling. (P270) Do not eat, drink, or smoke when using this product.

## Section 3 - Composition / Information on Ingredients

**Substances/Mixtures** — A trade secret claim is made for this item.

Component	CAS #	Weight-%
Nepheline Syenite	37244-96-5	20 - 40
Limestone	1317-65-3	10 - 20
Quartz	14808-60-7	10 - 20
Kaolin	1332-58-7	10 - 20



Bentonite	1302-78-9	1 - <3
C.I. Pigment Blue 28	1345-16-0	0.1 - 1

The other ingredients in this 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 this SDS. See Section 15 for TSCA inventory listing.

## Section 4 - First Aid Measures

### First-Aid Measures

<b>Eye Contact</b>	If eye contact occurs, rinse immediately with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. If irritation persists, seek medical attention.
<b>Skin Contact</b>	If skin irritation occurs, wash thoroughly with soap and water. If irritation persists, seek medical attention.
<b>Inhalation</b>	Move person to fresh air in a well-ventilated area. If coughing or respiratory irritation persists, seek medical attention.
<b>Ingestion</b>	Do not induce vomiting. Rinse mouth with water. Consult a physician and/or obtain competent medical assistance.
<b>General First Aid</b>	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical attention.

### Symptoms and Effects, both Acute and Delayed

<b>Eye Contact</b>	Prolonged contact with large amounts of dust may cause mechanical irritation. Glaze particles are abrasive and may scratch eyes.
<b>Skin Contact</b>	Prolonged contact with large amounts of dust may cause mechanical irritation.
<b>Inhalation</b>	Inhalation of high concentrations of dry glaze dust may cause mechanical irritation and discomfort. Long-term exposure may cause chronic effects (see Section 11).
<b>Ingestion</b>	Large quantities ingested may cause gastrointestinal irritation.
<b>Chronic Symptoms</b>	Repeated or prolonged exposure to respirable crystalline silica dust may cause lung damage in the form of silicosis. Symptoms include shortness of breath, fever, fatigue, loss of appetite, chest pain, dry non-productive cough.

## Section 5 - Fire Fighting Measures

<b>General Fire Hazards</b>	Glaze mixture in dry powder form is not flammable and does not support fire.
<b>Extinguishing Media</b>	Use appropriate extinguishing media for surrounding fire.
<b>Chemical Hazards from Fire</b>	Glaze mixture does not contain hazardous decomposition products.
<b>Protective Actions and Equipment for Fire-fighters</b>	Glaze mixture and packaging can become slippery when wet. Fire-fighters should wear appropriate protective equipment.

## Section 6 - Accidental Release Measures

<b>Clean-up Methods</b>	If appropriate, use gentle water spray to wet down and minimize dust generation.
<b>Personal Precautions and Personal Protective Equipment</b>	Wear appropriate protective equipment and clothing during clean-up. When dry sweeping, use NIOSH-approved respirators when dust levels exceed exposure limits.
<b>Environmental Precautions</b>	Do not allow spills or wastewater to flow into sewer or waterway.
<b>Emergency Procedures &amp; Methods of Containment</b>	For powder spills, do not dry sweep. Dampen with water first to minimize dust generation, or use a HEPA-filtered vacuum. Place collected material in a sealed container for proper disposal. (See Section 13 for guidance on appropriate disposal methods.)

## Section 7 - Handling & Storage

**Precautions for Safe Handling**

Avoid generating dust during handling, weighing, and transfer. Keep container sealed when not in use to prevent dust release and moisture absorption. Use proper lifting techniques to avoid physical injury.

**Recommendations on the Conditions for Safe Storage**

Store in a cool, dry location away from moisture. Keep container tightly closed when not in use to prevent dust release and moisture absorption. Store away from incompatible materials.

**Section 8 - Exposure Controls / Personal Protection****Airborne Exposure Limits**

Hazardous Ingredient	Wt. % Approx.	CAS #	OSHA PEL	ACGIH TLV
Nepheline Syenite	20 - 40	37244-96-5	5 mg/m <sup>3</sup> (respirable)	2 mg/m <sup>3</sup> (respirable)
Limestone	10 - 20	1317-65-3	5 mg/m <sup>3</sup> (respirable)	2 mg/m <sup>3</sup> (respirable)
Quartz	10 - 20	14808-60-7	0.05 mg/m <sup>3</sup> (respirable)	0.025 mg/m <sup>3</sup> (respirable)
Kaolin	10 - 20	1332-58-7	5 mg/m <sup>3</sup> (respirable)	2 mg/m <sup>3</sup> (respirable)
Bentonite	1 - <3	1302-78-9	5 mg/m <sup>3</sup> (respirable)	2 mg/m <sup>3</sup> (respirable)
C.I. Pigment Blue 28	0.1 - 1	1345-16-0	0.02 mg/m <sup>3</sup> (as Co)	0.02 mg/m <sup>3</sup> (as Co)

**Engineering Measures**

Dry powder glaze generates respirable dust during normal handling, weighing, and mixing. Use local exhaust ventilation or other engineering controls to maintain exposures below applicable occupational exposure limits (TLV). Minimize dust generation by using enclosed transfer systems or dampening methods where feasible.

**Personal Protective Equipment (PPE)****Respiratory**

Dust may be generated when working with dry glaze or during spray application. To minimize exposure to dust and/or crystalline silica, cutting or sanding dry clay/glaze products should be conducted with sufficient ventilation. Respirable dust and quartz levels should be monitored regularly. When dust levels exceed exposure limits, NIOSH/MSHA-approved respirators must be worn in accordance with OSHA requirements at 29 CFR 1910.134. In most cases, a disposable N-95 Particulate Respirator is sufficient.

**Eyes**

Use of NIOSH/OSHA-approved safety glasses with side shields is recommended. Wear tight-fitting dust goggles when excessively dusty conditions are present. NIOSH recommends that contact lenses not be worn when working with crystalline silica dust.

**Skin and Body**

Use gloves and/or protective clothing if abrasion or allergic reactions are experienced.

**Work/Hygienic Practices**

Avoid creating and breathing dust. Wear NIOSH/MSHA-approved dust mask (N-95) when working in dusty conditions. Food, beverages, and smoking materials should NOT be in the work area. Wash thoroughly before eating, drinking, smoking, or applying cosmetics.

**Section 9 - Physical & Chemical Properties**

<b>Appearance</b>	Colored fine powder	<b>Decomposition Temp.</b>	Not applicable
<b>Physical State</b>	Dry powder	<b>Viscosity</b>	Not applicable
<b>pH</b>	Not applicable (powder; 6-8 when mixed with water)	<b>Flash Point</b>	Not applicable
<b>Odor</b>	Odorless to slight earthy odor	<b>Boiling Point</b>	Not applicable
<b>Odor Threshold</b>	Not applicable	<b>Flammability</b>	Not applicable
<b>Melting Point</b>	> 955 °C (>1750°F)	<b>Vapor Pressure</b>	Not applicable
<b>Freezing Point</b>	Not applicable	<b>Vapor Density</b>	Not applicable
<b>Relative Density/ Specific Gravity</b>	~0.8-1.2 g/cc (bulk density)	<b>Partition Coefficient</b>	Not applicable
<b>Evaporation Rate</b>	No data available	<b>Auto-ignition Temp.</b>	Not applicable



Solubility in Water Partially soluble / dispersible

## Section 10 - Stability & Reactivity

Reactivity	No dangerous reactions are known under normal conditions of use.
Chemical Stability	Stable at standard temperature and pressure. No stabilizers required to maintain chemical stability.
Possibility of Hazardous Reactions and Conditions to Avoid	None known.
Incompatibility / Hazardous Decomposition Products	None known.

## Section 11 - Toxicological Information

### OSHA, IARC, and NTP Carcinogen Classifications

Component	CAS #	NTP	IARC	OSHA
Quartz	14808-60-7	YES	YES - 1	YES
C.I. Pigment Blue 28	1345-16-0	NO	YES - 2B	NO

**OSHA** - Occupational Safety & Health Administration | **NTP** - National Toxicology Program | **IARC** - International Agency for Research on Cancer  
1 = Carcinogenic to humans | 2A = Probably carcinogenic | 2B = Possibly carcinogenic

Primary Route of Exposure	Skin, Eye Contact, Inhalation, and Ingestion
Specific Organ Toxicity — Single Exposure	Target organs include eyes, skin, respiratory system, and gastrointestinal tract.
Specific Organ Toxicity — Repeated Exposure	Causes damage to eyes, skin, respiratory system, and gastrointestinal tract through prolonged or repeated exposure.
Acute Short-Term Exposure Effects	May cause eye irritation, skin irritation, respiratory tract irritation, and gastrointestinal tract irritation. Inhalation of high concentrations of dry glaze dust may cause mechanical irritation and discomfort. Long-term exposure may cause chronic effects.
Chronic Long-Term Exposure Effects	Silica has been classified by OSHA as a human lung carcinogen. Repeated or prolonged exposure to respirable crystalline silica dust may cause lung damage in the form of silicosis.  Effects of silicosis include bronchitis/chronic obstructive pulmonary disorder, increased susceptibility to tuberculosis, scleroderma (a disease affecting skin, blood vessels, joints and skeletal muscles), and possible renal disease. Acute silicosis can be fatal.
Related Symptoms	Symptoms include shortness of breath, fever, fatigue, loss of appetite, chest pain, dry non-productive cough.
Medical Conditions Aggravated by Exposure	Individuals with pre-existing allergies, eye disorders, skin disorders, respiratory disorders, and/or gastrointestinal disorders may have increased susceptibility to the effects of exposure.

## Section 12 - Ecological Information (non-mandatory)

Ecotoxicity	None known.
Biochemical Oxygen Demand (BOD5)	None known.
Chemical Oxygen Demand (COD)	None known.
Products of Biodegradation	None known.
Toxicity of the Products of Biodegradation	None known.



Bioaccumulation Potential	None known.
Potential to Move from Soil to Groundwater	None known.
Other Adverse Effects	None known.

### Section 13 - Disposal Considerations (non-mandatory)

Personal Protection	Refer to Section 8 for proper PPE when disposing of waste material.
Appropriate Disposal Containers	Standard waste disposal containers — no special requirements.
Appropriate Disposal Methods	<p>Disposal of this product should comply with the requirements of environmental protection and waste disposal legislation and any regional or local authority requirements.</p> <p>The generation of waste should be avoided or minimized. Dispose of non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.</p>
Physical and Chemical Properties that May Affect Disposal	Dry glaze powder should be placed in a sealed container to reduce or eliminate dust release during transport and disposal.
Sewage Disposal	Do not dispose of into sinks or toilets. Never dispose of this product into a sewer system.
Special Precautions for Landfills or Incineration	There are no special precautions for disposal in a landfill. This product is non-combustible and is not suitable for incineration.

### Section 14 - Transportation Information (non-mandatory)

Regulatory Classification	Status
DOT Classification	Not regulated
TDG Classification	Not regulated
ADR/RID Class	Not regulated
IMDG Class	Not regulated
IATA-DGR Class	Not regulated

### Section 15 - Regulatory Information (non-mandatory)

TSCA - Toxic Substances Control Act - EPA	All ingredients in this mixture are listed on the TSCA Chemical Substance Inventory. See inventory listing below.
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California Prop. 65 WARNING	<b>WARNING: This product can expose you to chemicals including quartz (crystalline silica) and cobalt and cobalt compounds, which is/are known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>.</b>
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SARA/Title III (Emergency Planning & Community Right-to-Know Act)	This mixture contains no substances at or above the reporting threshold under Section 313, based on available data.
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#### TSCA Chemical Substance Inventory Listing

Substance	CAS #
Nepheline syenite	37244-96-5
Calcium carbonate	1317-65-3
Quartz	14808-60-7
Kaolin	1332-58-7
Glass, oxide, chemicals	65997-18-4
C.I. Pigment Yellow 159	68187-15-5
Zirconium Silicate (ZrSiO <sub>4</sub> )	10101-52-7



Praseodymium Oxide (Pr <sub>6</sub> O <sub>11</sub> )	12037-29-5
Smectite-group minerals	1302-78-9
C.I. Pigment Blue 28	1345-16-0
Cobalt Aluminate Blue (CoAl <sub>2</sub> O <sub>4</sub> )	1345-16-0

## Section 16 - Other Information (non-mandatory)

### Definitions

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>CAS</b>	Chemical Abstract Service
<b>GHS</b>	Globally Harmonized System of Classification and Labeling of Chemicals
<b>IARC</b>	International Agency for Research on Cancer
<b>OSHA</b>	Occupational Safety & Health Administration
<b>MSHA</b>	Mine Safety and Health Administration
<b>NIOSH</b>	National Institute of Occupational Safety and Health
<b>NTP</b>	National Toxicology Program
<b>HCS</b>	Hazard Communication Standard
<b>OSHA PEL</b>	OSHA Permissible Exposure Limit
<b>STEL</b>	Short-Term Exposure Limit
<b>TLV</b>	Threshold Limit Value
<b>TWA</b>	Time-Weighted Average

### Three types of TLVs for chemical substances as defined by ACGIH:

<b>TLV-TWA</b>	Time-weighted average — average exposure on the basis of an 8h/day, 40h/week work schedule.
<b>TLV-STEL</b>	Short-term exposure limit — spot exposure for a duration of 15 minutes, that cannot be repeated more than 4 times per day, with at least 60 minutes between exposure periods.
<b>TLV-C</b>	Ceiling limit — absolute exposure limit that should not be exceeded at any time.

This SDS is in compliance with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), and is subject to revision at any time without notice. Its current revision date is: February 18, 2026.

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Nothing herein is to be construed as recommending any practice or any product in violation of any patent or in violation of any law or regulation. It is the user's responsibility to determine for himself the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. We make no warranty as to the results to be obtained in using any material and, since conditions of use are not under our control, we must necessarily disclaim all liability with respect to the use of any material supplied by us.