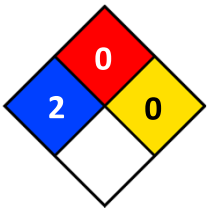
HMIS Ratings

Health Hazard	2
Fire Hazard	0
Reactivity Hazard	0
Max. Personal Protection	E



Date Prepared: 10/13/16
Revised: 10/13/16

SAFETY DATA SHEET

Section 1: Product and Company Identification

Product name(s): CT3
Common Name(s): Pottery Clay, Dry Clay, Moist Clay
Recommended Uses: Non-exhaustive list: pottery, artwork, and ceramic building materials
Restrictions on Use: Not Applicable

Manufacturer's Name & Address:

Rocky Mountain Clay
1220 W 1st Ave
Denver, CO 80012

Telephone: 303-805-0516
Fax: 303-805-0516
Email: Clay@rockymountainclay.com

Emergency Phone: For Emergencies, call Poison Control: (800) 222-1222 or 911

Section 2: Hazards Identification

Contains Crystalline Silica ≥1% ≤5% Respirable

GHS label elements/ Hazard pictograms:

Signal Word: Danger

OSHA/HCS Status: Clay mixture in dry form is considered hazardous by the OSHA Hazard Communication Standard: (29 CFR 1910.1200)

Classification:

Specific Target Organ Toxicity - Repeated Exposure	Category 1 - Respiratory
Carcinogenicity	Category 1A

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.

H332: 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:

P260: Do not breathe dust.
P285: In case of inadequate ventilation wear respiratory protection.
P280: Wear protective gloves, eye, and respiratory protection.

Section 3: Composition/Information on Ingredients

Mixture Statement: The specific chemical identity and/or exact percentage (concentration) of composition have been withheld as a trade secret. Yet total component percentages does not exceed the upper percentage value

Hazardous Material	Wt. % Approx.	CAS #
Silica, Crystalline (Quartz)	12-17%	14808-60-7
Titanium Dioxide	.5-1%	13463-67-7
Kaolin Clay	20-60%	1332-58-7
Talc, non-asbetiform	20-60%	14807-96-6
Bentonite	1-2%	1302-78-9
Feldspar	5-10%	68476-25-5

Section 4: First Aid Measures

First Aid Measures

Eye Contact If eye contact occurs, rinse immediately with plenty of water. If irritation persists, seek medical attention.

Skin Contact If irritation occurs, wash thoroughly with water. If it persists, seek medical attention.

Inhalation Move victim to fresh air in well ventilated area. If coughing or irritation persists, seek medical attention.

Ingestion Consult physician and/or obtain competent medical assistance.

Symptoms and Effects, both Acute and Delayed

Eye Contact Prolonged contact with large amounts of dust may cause mechanical irritation.

Skin Contact Prolonged contact with large amounts of dust may cause mechanical irritation.

Inhalation Inhalation of high concentrations of dry clay dust may cause mechanical irritation and discomfort. Long term exposure may cause chronic effects (see section 11)

Ingestion Large quantities ingested may cause gastrointestinal irritation.

Chronic Symptoms Repeated or prolonged exposure to respirable crystalline silica dust may cause lung damage in the form of silicosis. Symptoms will include shortness of breath, fever fatigue, loss of appetite, chest pain, dry non-productive cough.

Section 5: Firefighting Measures

General Fire Hazards: Clay mixture in dry or moist form is not flammable and does not support fire. The paper bags or plastic bags and cardboard boxes containing the mixture are flammable.

Extinguishing Media: Use appropriate extinguishing media for surrounding fire

Chemical Hazards from fire: Clay mixture does not contain hazardous decomposition products

Protective actions and equipment for fire-fighters: Clay mixture and packaging can become slippery when wet. Fire-fighters should wear appropriate protective equipment.

Section 6: Accidental Release Measures

Clean-up Methods: If appropriate, use gentle water spray to wet down and minimize dust generation.

Personal Precautions and Protective Equipment: Wear appropriate protective equipment and clothing during cleanup. When dry sweeping use NIOSH approved respirators when dust levels exceed exposure limits.

Environmental Precautions: Clay is a natural mineral product mixture and will not cause adverse effects to the water system other than turbidity from suspended particles.

Emergency procedures & Methods of Containment: There are no emergency procedures required for this mixture. Place dry clay dust in a sealed container for re-use or proper disposal.

Section 7: Handling and Storage

Precautions for safe handling: Use proper lifting techniques to avoid physical injury. Avoid dust generation and accumulation. Do not use in poorly ventilated or confined spaces. Do not taste or swallow. Avoid inhalation or contact. Wash thoroughly after handling.

Condition for safe storage: Store in a cool dry place. Do not store moist clay mixture below freezing point (< 0 °C or <32 F)

Section 8: Exposure Controls/Personal Protection

Airborne Exposure Limits:

Hazardous Material	Wt. % Approx.	CAS #	OSHA PEL* (mg/m3)	ACGIH TLV* (mg/m3)	Respirable or Total Dust
Silica, Crystalline (Quartz)	12-17%	14808-60-7	0.1	0.025	Respirable
Titanium Dioxide	.5-1%	13463-67-7	15	10	Total Dust
Kaolin Clay	20-60%	1332-58-7	5	2	Respirable
			15	-	Total Dust
Talc, non-asbetiform	20-60%	14807-96-6	2	2	Respirable
Bentonite	1-2%	1302-78-9	5	3	Respirable
			15	10	Total Dust
Feldspar	5-10%	68476-25-5	5	2	Respirable

Engineering Measures: Clay mixture in moist form poses no inhalation health risk. Once clay mixture has dried, there may be dust generated by cleaning and working processes. In the event that dust is generated, use local exhaust ventilation or other engineering controls as required to maintain exposures below applicable occupational exposure limits (TLV).

Personal Protection Equipment (PPE)

Respiratory: Dust is generated when working with dry clay mixture. To minimize exposure to dust and/or crystalline silica, cutting or sanding dry clay products should be conducted with sufficient ventilation. Respirable dust and quartz levels should be monitored regularly. Dust and quartz levels in excess of appropriate exposure limits should be reduced by feasible engineering controls, including (but not limited to) wet sanding, wet suppression, ventilation, and process enclosure. When such controls are not feasible, NIOSH/MSHA approved respirators must be worn in accordance with a respiratory protection program which meets OSHA requirements as set forth at 29 CFR1910.134 and ANSI Z88.2-1080 "Practices for Respiratory Protection". In most cases, a disposable N-95 Particulate Respirator is sufficient.

Eyes Use of NIOSH/OSHA approved safety glasses with side shields is recommended. Face shields should also be used when dry sawing clay products. Wear tight fitting dust goggles when excessively (visible) dusty conditions are present or are anticipated. NIOSH recommends that contact lenses not be worn when working with crystalline silica dust.

Skin and Body Protective Clothing is not essential. Use gloves and/or protective clothing if abrasion or allergic reactions are experienced.

Section 9: Physical Chemical Properties

Physical State: Solid
Color: light gray to brown
Odor: earthy odor
pH: 6-8 (aqueous solution)
Boiling Point: Not applicable
Decomposition: loses crystalline water at > 500°C (930°F)
LEL: Not applicable
Vapor Pressure: Not applicable
Density Not applicable
Water Solubility: None
Auto Ignition: Will not ignite
Flow Point: Not applicable
VOC: None

Appearance: lump /dry powder or clay
Physical Form: powder to lump
Odor Threshold: Not applicable
Melting Point: > 1500°C
Flash Point: Will not ignite
Evaporation Rate: Not applicable
UEL: Not applicable
Vapor Density (air = 1): Not applicable
Specific Gravity (water = 1): ~2.6 gm/cc
Coeff> Water/Oil Dist: Not applicable
Viscosity: Not applicable
Sublimation Point: Not applicable

Section 10: Stability and Reactivity

Reactivity No reactive hazard is expected.

Chemical Stability Stable at standard temperature and pressure. No stabilizers required to maintain chemical stability. Safety issues - Mold may form in plastic bag (moist clay mixture) after several months of shelf life.

Possibility of Hazardous Reactions and Conditions to Avoid None Known

Incompatibility / Hazardous decomposition products None Known

Section 11: Toxicological Information

Primary Route of Exposure: Skin, Eye Contact, Inhalation and Ingestion

Specific Organ Toxicity - Single Exposure
Target organs include ears, 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 clay 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 of 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
Will 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.

OSHA, IARC, and NTP Carcinogen Classifications

Chemicals with Carcinogen Potential	CAS #	OSHA	IARC	NTP
Crystalline Silica – quartz	14808-60-7	YES	YES-1	YES
Talc	14807-96-6	NO	YES-1	NO
Titanium Dioxide	13463-67-7	NO	YES-2B	NO

Definitions
IARC - International Agency for Research on Cancer
OSHA - Occupational Safety & Health Administration
NTP - National Toxicology Program

IARC Classification
1 = Carcinogenic to humans
2A = Probably carcinogenic to humans
2B = Possibly carcinogenic to humans

Section 12: Ecological Information (non-mandatory)

Eco-toxicity	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	Disposal of this product should comply with the requirements of environmental protection and waste disposal legislation and any regional or local authority requirements.
Physical and chemical properties	Dry clay dust should be placed in a sealed container or in a manner that reduces or eliminates

that may affect disposal	the release of the product. Moist clay has no special requirements.
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 activities	There are no special precautions for disposal in a landfill. This product is non-combustible and is not suitable for incineration.

Section 14: Transport Information (non-mandatory)

EPA Waste Number: Not regulated.
DOT Classification: Not regulated.
IMO Classification: Not regulated.
Internal UN: Not regulated.
IMDG Code: This product is not considered to be a marine pollutant.

Section 15: Regulatory Information (non-mandatory)

TSCA - Toxic Substances Control Act – EPA: Quartz and other chemicals are listed in the TSCA Chemical Substance Inventory.

California Prop. 65 WARNING: This product contains a chemical known to the State of California to cause cancer. (Prop. 65 - California Health and Safety Code Section 2549 Et Seq).

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.

Section 16: Other Information (non-mandatory)

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: 10/18/2016

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.

RMC is not liable for injury, loss, or damage, direct or consequential, arising out of the use or inability to properly use this product. This product is intended only for use in traditional ceramic applications. This product and MSDS conforms to ASTM D-4236 and C-1023 under the Federal Labeling of Hazardous Art Materials Act (LHAM