

Rockwood Clay Based Additives

MATERIAL SAFETY DATA SHEET



1. Product and Company Identification

Material name CLAYTONE® II
Version # 02
Revision date Mar-12-2012
Synonym(s) Organoclay
Manufacturer information Rockwood Clay Based Additives
Southern Clay Products, Inc.
1212 Church Street
Gonzales, TX 78629 United States
msdsinfo@scprod.com
www.scprod.com
Customer Service +1 (830) 672 - 2891
CHEMTREC (INTERNATIONAL) +1 (703) 527 - 3887
CHEMTREC (US) (800) 424 - 9300

Product use This product is a clay based rheological additive used for gelling efficiency
CLAYTONE® products are rheological additives used for gelling efficiency in oil based paints, stains, alkyd enamels and primers, epoxy systems and numerous other hydrophobic systems.

2. Hazards Identification

Emergency overview WARNING! May form combustible dust concentrations in air (during processing) Cancer hazard.
Exposure to powder or dusts may be irritating to eyes, nose and throat.
Prolonged exposure may cause chronic effects. Material can be slippery when wet.

OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

Routes of exposure

Inhalation.

Eyes

Dust in the eyes will cause irritation. Avoid contact with eyes.

Skin

Dust or powder may irritate the skin. Avoid contact with the skin.

Inhalation

May cause cancer by inhalation. Dust may irritate respiratory system. Repeated or prolonged inhalation may cause toxic effects. Avoid breathing dust/fume/gas/mist/vapors/spray. For additional information on inhalation hazards, see Section 11 of this safety data sheet.

Ingestion

May cause irritation. Do not ingest.

Target organs

Eyes. Respiratory system.

Chronic effects

This product has the potential for generation of respirable dust during handling and use. Dust may contain respirable crystalline silica. Overexposure to dust may result in pneumoconiosis, a respiratory disease caused by inhalation of mineral dust, which can lead to fibrotic changes to the lung tissue, or silicosis, a respiratory disease caused by inhalation of silica dust, which can lead to inflammation and fibrosis of the lung tissue. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

Signs and symptoms

May cause skin irritation and/or dermatitis.

Potential environmental effects Ecological injuries are not known or expected under normal use.

3. Composition / Information on Ingredients

Hazardous components	CAS #	Percent
Quartz	14808-60-7	0 - 3
Non-hazardous components	CAS #	Percent
Quaternary Ammonium Compounds, Bis(hydrogenated Tallow Alkyl)dimethyl, Salts With Bentonite	68953-58-2	97 - 100

4. First Aid Measures

First aid procedures

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms occur.

Skin contact	Remove and isolate contaminated clothing and shoes. Wash off with warm water and soap. For minor skin contact, avoid spreading material on unaffected skin. Get medical attention if irritation develops and persists.
Inhalation	If dust from the material is inhaled, remove the affected person immediately to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician if symptoms develop or persist.
Ingestion	Rinse mouth. If ingestion of a large amount does occur, seek medical attention. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If ingestion of a large amount does occur, call a poison control center immediately. Rinse mouth with water.
Notes to physician	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed. Treat symptomatically.
General advice	IF exposed or concerned: Get medical advice/attention. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. No hazards which require special first aid measures.

5. Fire Fighting Measures

Flammable properties	Dusts may form an explosive mixture with air. This product is combustible at high temperatures.
Extinguishing media	
Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Protection of firefighters	
Specific hazards arising from the chemical	Explosion hazard. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Take precautionary measures against static discharge. Material can be slippery when wet.
Protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective clothing.
Fire fighting equipment/instructions	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.
Specific methods	Cool containers exposed to flames with water until well after the fire is out.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Avoid inhalation of dust from the spilled material.
Environmental precautions	No special environmental precautions required. Do not flush into surface water. Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods for containment	Avoid allowing water runoff to contact spilled material. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Prevent entry into waterways, sewer, basements or confined areas. Contaminated surfaces will be extremely slippery.
Methods for cleaning up	Dike far ahead of spill for later disposal. Collect dust using a vacuum cleaner equipped with HEPA filter. Avoid dust formation. Following product recovery, flush area with water. For waste disposal, see section 13 of the MSDS. Dust Deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Nonsparking tools should be used.

7. Handling and Storage

Handling

Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation.
Do not breathe dust from this material. Avoid contact with skin and eyes. Avoid contact with eyes. Wear personal protective equipment. Avoid prolonged exposure. Handle and open container with care. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

Storage

Store in a well-ventilated place. Keep container tightly closed. Avoid dust formation. Guard against dust accumulation of this material. Keep out of the reach of children. Protect from moisture.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Quartz (14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.

US. ACGIH Threshold Limit Values

Additional components	Type	Value	Form
Nuisance dust (Dust)	TWA	10 mg/m ³	Inhalable particles.
		3 mg/m ³	Respirable particles.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Quartz (14808-60-7)	TWA	0.1 mg/m ³	Respirable.
		0.3 mg/m ³	Total dust.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Additional components	Type	Value	Form
Nuisance dust (Dust)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
	TWA	15 mppcf	Respirable fraction.
		5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
		50 mppcf	Total dust.

Exposure guidelines

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

Engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).
Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

Eye / face protection

Wear safety glasses with side shields. Use tight fitting goggles if dust is generated. Eye wash fountain is recommended.

Skin protection

Wear protective gloves.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit. Wear positive pressure self-contained breathing apparatus (SCBA). Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

General hygiene considerations

Do not breathe dust. Avoid contact with eyes. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Powder.
Physical state	Solid.
Form	Powder
Color	Off-white.
Odor	Odorless.
Odor threshold	Not available.
pH	Not applicable
Vapor pressure	Not applicable
Vapor density	Not applicable
Boiling point	Not applicable
Melting point/Freezing point	Not applicable
Solubility (water)	Insoluble
Specific gravity	1.50 - 1.70
Relative density	Not available.
Flash point	Not applicable
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	>= 0.05 g/l
Auto-ignition temperature	374 °F (190 °C) Thin Film Ignition
Evaporation rate	Not applicable
Percent volatile	0 % estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Avoid spread of dust. Avoid dust close to ignition sources. Exposure to moisture.
Incompatible materials	None known.
Hazardous decomposition products	No dangerous reaction known under conditions of normal use.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Local effects	Inhalation of dusts may cause respiratory irritation.
Chronic effects	Hazardous by OSHA criteria. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. Overexposure to dust may result in pneumoconiosis, a respiratory disease caused by inhalation of mineral dust, which can lead to fibrotic changes to the lung tissue, or silicosis, a respiratory disease caused by inhalation of silica dust, which can lead to inflammation and fibrosis of the lung tissue. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.
Carcinogenicity	Hazardous by OSHA criteria. Cancer hazard.
ACGIH Carcinogens	
Quartz (CAS 14808-60-7)	A2 Suspected human carcinogen.
IARC Monographs. Overall Evaluation of Carcinogenicity	
Quartz (CAS 14808-60-7)	1 Carcinogenic to humans.
US NTP Report on Carcinogens: Known carcinogen	
Quartz (CAS 14808-60-7)	Known carcinogen.

12. Ecological Information

Ecotoxicity	This product has no known eco-toxicological effects.
--------------------	--

Persistence and degradability Not inherently biodegradable.

13. Disposal Considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.

Waste from residues / unused products Not applicable. Material should be recycled if possible. Can be landfilled, when in compliance with local regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

DOT

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
CERCLA/SARA Hazardous Substances - Not applicable.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2))

Not regulated

DEA Essential Chemical Code Number

Not regulated

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated

DEA Exempt Chemical Mixtures Code Number

Not regulated

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

State regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Quartz (CAS 14808-60-7) Listed: October 1, 1988 Carcinogenic.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

Quartz (CAS 14808-60-7) Listed.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

REACH - EU REACH Registration number: Surface treated substance. Direct registration is not required. ECHA FAQ 6.3.8.

Bentonite is exempted from REACH registration in accordance with Annex V.7. A hazard assessment has been conducted under the umbrella of the European Bentonite Association (EUBA) and the outcome was that bentonite is not a hazardous substances. Therefore, in absence of identified hazard, the substance is safe and presents no risk.

16. Other Information

Further information

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.)

In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003)

According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations. HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 1*
Flammability: 0
Physical hazard: 0

NFPA ratings

Health: 1
Flammability: 0
Instability: 0

Disclaimer

MANUFACTURER DISCLAIMER: The information given within this SDS is correct to the best of our knowledge, information and belief at the date of its revision and publication. However, the manufacturer makes no representation, warranty or guarantee as to its accuracy, reliability or completeness, nor assumes any liability for its use. It is the user's responsibility to confirm in advance that the information is current, applicable and suitable to their circumstances for each particular use. No representative of ours has authority to waive this provision. Please call for document accuracy if the revision date has exceeded 3 years.

Issue date

Mar-12-2012

This data sheet contains changes from the previous version in section(s):

This document has undergone significant changes and should be reviewed in its entirety.