Safety Data Sheet (SDS)



SECTION 1: Product Identification

Product Identifier: TriCure Granular

Synonyms: Non-ionic soil surfactant - granular
CAS number: Mixture no single CAS number available

Manufacturer: Mitchell Products

Address: 1205 West Main Street, Millville, NJ 08332

 Phone:
 856-327-2005

 Emergency Phone:
 866-436-0500

 Date Prepared:
 01-12-2023

Recommended Use: Surfactant used to reduce and prevent hydrophobicity formation in the soil

SECTION 2: Hazard(s) Identification

Hazard Classification: Carcinogenicity, Category 1A, 2

Specific Target Organ Toxicity, Category 2

Skin Irritant, Category 2, 3 Eye Irritant, Category 2A, 2B Acute toxicity, oral Category 5

Signal Word: "WARNING" "DANGER"

Hazard Statement: H303 – May be harmful if swallowed

H315 - Causes skin irritation

H319 – Causes serious eye irritation

H350 - May cause cancer

H373 – May cause damage to organs (lungs, nasal cavities, paranasal sinuses)

through prolonged or repeated exposure

Precautionary Statement: (PREVENTION)

P264 – Wash thoroughly after handling.

P270 – Do not eat, drink or smoke when using this product.

P280 – Wear protective gloves.

P285 – NIOSH-MSHA approved dust respirators for conditions where dust levels

may exceed exposure limits

P285 – As required to maintain exposures below TLV's. Vent dust to collector.

P281 – Dust goggles should be worn when visibly dusty conditions exist.

(RESPONSE)

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if

you feel unwell.

P330 – Rinse mouth.

P302 + P352 – IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for 20 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 – If eye irritation persists: Get medical advice/attention.

P362 + P364 - Take off contaminated clothing.

(Storage)

P402 – Store in a dry place.

P405 – Restrict or control access to stockpile areas. Engulfment hazard: To prevent burial or suffocation, do not enter a confined space, such as a silo, bulk truck or other storage container or vessel that stores or contains aggregates without an effective procedure for assuring safety.

(Disposal)

P501 – Dispose of content/container in accordance with local registration.

GHS Hazard Pictograms:



SECTION 3: Composition/Information on Ingredients

Chemical Name: Oxirane 2-methyl polymer with oxirane

Common Name: N/A Proprietary

Chemical Name: Dolomite limestone, Wood dust, and Calcium lignosulfonate

Common Name: N/A CAS #: Proprietary

Contents of chemical name and hazardous compounds are a trade secret as allowed by 29 CFR 1910.1200 (i) 1.

SECTION 4: First Aid Measures

Routes of Exposure: Inhalation, Ingestion, eyes and skin

Symptoms

Ingestion:

Inhalation: Acute – Dusts may irritate the nose, throat and respiratory tract by

mechanical abrasion and drying. Coughing, sneezing, shortness of breath

may occur.

Chronic – Long term exposure to crystalline silica may cause a chronic lung disease, silicosis. Respirable Crystalline Silica (RCS) may cause cancer. Limestone is a naturally occurring mineral complex that contains varying quantities of quartz (crystalline silica). In its natural bulk state, limestone is not a known health hazard. Limestone may be subjected to various natural or mechanical forces that produce small particles (dust)

which may contain RCS (particles less than 10 micrometers in

aerodynamic diameter). Repeated inhalation of RCS (quartz) may cause lung cancer according to IARC and NTP; ACGIH states that its is a suspected cause of cancer. Other forms of RCS (e.g., tridymite and cristobalite) may also be present or formed under certain industrial

processes.

Wood dust is listed as carcinogen by NTP, OSHA, or IARC – Group 1: Carcinogenic to humans, sufficient evidence or carcinogenicity. This classification is primarily based on studies showing association of exposure to wood dust and Adenocarcinoma of the nasal cavities and paranasal sinuses. IARC did not find sufficient evidence of an association

between occupational exposure to wood dust and other cancers.

Ingestion of this product is not a likely route of entry. Overexposure may

cause diarrhea, nausea, and vomiting.

Eyes: Acute – Dust particles can scratch the eye causing tearing, redness, a stinging or burning feeling, or swelling of the eyes with blurred vision.

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Chronic - no known effects.

Skin: Acute – Dust particles can dry, scratch and irritate the skin resulting in

redness, itching or burning feeling, swelling or the skin, and / or rash.

Chronic - no known effects.

First Aid

Skin:

Inhalation: Remove to fresh air. Dust in throat and nasal passages should clear

spontaneously. Contact physician if irritation persists or if breathing

is difficult.

Ingestion: Contact physician or poison control center. If victim is conscious and able

to swallow, quickly give water or milk to dilute. Do not give sodium

bicarbonate, vinegar, or fruit juices. Never give anything by mouth if victim

is unconscious or having convulsions. Do not induce vomiting. Seek

medical attention if necessary.

Eyes: Flush immediately with copious amounts of water for at least 15 minutes,

while holding the eyelid open. Occasionally lift the eyelid(s) to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from

the eye(s). Contact a physician if irritation persists or later develops. Wash exposed areas thoroughly with mild soap and water. Remove

contaminated clothing. Contact physician irritation persists or later

develops. (Skin absorption is not known to occur.)

Pre-existing medical conditions that may be aggravated by exposure include disorders of the eye, skin, and lung (including asthma and other breathing disorders). If addicted to tobacco, smoking will impair the ability of the lungs to clear themselves of dust.

SECTION 5: Fire-Fighting Measures

Extinguishing Data:

Special Procedures:

Extinguish with powder, foam, carbon dioxide, or water mist

N/A

Unusual Fire & Explosive Hazards:

Firefighters should use self-contained breathing apparatus to avoid exposure to smoke and gasses.

LEL for wood dust: Depending on the moisture content and particulate diameter, wood dust may explode in the presence of an ignition source. An airborne concentration of 40 grams of dust per cubic meter of air is often used as the LEL for wood dust. (Dust class St-1 for minus 40 mesh wood dust)

Lignosulfonate dust combustible dust characteristics: MIE: 1130 mJoule; Kst: Dus class St1 (0-200 bar*m/s); Particle size: 100% < 150 micron. Contact with powerful oxidizing agents may cause fire and/or explosions.

(See section 10 of this SDS)

When heated at 1700°F or more for prolonged periods, dolomitic limestone decomposes into dolomitic quicklime (CaOMgO) releasing carbon dioxide (decomposition can begin at 1100°F). Dolomitic quicklime generates heat

(and potentially steam) when exposed to water.

SECTION 6: Accidental Release Measures

Personal Precautions: Cleanup Procedures:

Wear dust mask.

Sweep up granular material. Spilled materials, where dust is generated, may overexpose clean up personnel to respirable dust. Use of respiratory protective equipment may be necessary. Prevent generating airborne dust; do not use compressed air for clean-up. Pellets will disperse in water; prevent spilled materials from entering streams, drains, or sewers. If material has been exposed to water, apply absorbent product like clay or Speedy Dry. Continue applying until spill has been absorbed. Place contents into recovery drum. Block off area to avoid slipping. Consult local, state, and federal regulations before disposing this material.

SECTION 7: Handling & Storage

Precautions for Safe Handling: Storage Recommendations:

No special requirements.

Store in a dry, cool, well ventilated area. Keep formation of airborne dusts to a minimum. Do not breathe dust. Avoid contact with fluorine, oxidizing agents, drying oils. Avoid contact with open flames.

Provide appropriate exhaust ventilation at places where dust is formed. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Bulk density can exceed 65 pounds per cubic foot. Verify storage structures (bins, silos, etc.) have sufficient strength to contain the material. Stack bagged material in secure manner to prevent falling.

Engulfment hazard. To prevent burial or suffocation, do not enter a confined space, such as a silo, bin, bulk truck, or other storage container or vessel that stores or contains granular pellets. Dust can build up or adhere to the walls of a confined space and release, collapse, of fall unexpectedly.

SECTION 8: Exposure Controls / Personal Protection

Exposure limits vary with the % quartz dust. Refer to ACGIH and MSHA for current TLV's and TWA's.

Selected Occupational Exposure Limits for airborne dust (effective, June 1, 2015).

- 1 Value equivalent to OSHA formulas (29 CFR 1910.1000) and MSHA formulas (1973 TLVs at 30 CFR 56/57.5001)
- 2 Value also applies to MSHA Metal / Non-Metal (1973 TLVs at 30 CFR 56/57.5001).
- 3 OSHA enforces 0.250 mg/m³ in construction and shipyards (CPL-03-00-007).
- 4 Value also applies to OSHA construction (29 CFR 1926.55, Appendix A)
- 5 MSHA limit = 10 mg/m³.
- 6 Value also applies to shipyards (29 CFR 1915), marine terminals (29 CFR 1917), and longshoring (29 CFR 1918).

Components	Type	Value	Form			
Particulates not otherwise classified (CAS SEQ250)	PEL	5 mg/m³ 15 mg/m³	Respirable Fraction Total Dust			
Calcium Carbonate (CAS 1317-65-3)	TWA	5 mg/m³ 15 mg//m³	Respirable fraction 6 Total dust 5,6			
<-<-< US. OSHA Table Z-3 (29 CFR 1910.1000) >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>						
Components	Type	Value	Form			
Crystalline Silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m ³	Total dust. 1,2,3			
		0.1 mg/m³	Respirable 1,2,3			
		2.4 mppcf	Respirable 1,3,4			
Particulates not otherwise classified (CAS SEQ250)	TWA	5 mg/m³	Respirable fraction. 1			
		15 mg/m³	Total dust. 1,4,5			
		50 mppcf	Total dust. 1,4			
		15 mppcf	Respirable fraction. 1			

Tridymite and Cristobalite (other forms of crystalline	TWA	0.15 mg/m ³	Total dust. 1
silica) (CAS Mixture)		0.05 mg/m ³	Respirable. 1
		1.2 mppcf	Respirable, 1

Components Crystalline Silica (CAS 14808-60-7)	Type TWA	Value 0.025 mg/m³	Form Respirable fraction.			
Tridymite and Cristobalite (other forms of crystalline silica) (CAS Mixture)	TWA	0.025 mg/m³	Respirable fraction.			
Silica) (CAS MIXIGE) 1 VVA 0.025 Tig/Till Respirable fraction. 4 < 5 5 6 7 7 8 7 8 9 1 1 7 8 9 9 1 1 1 1 2 1 2 1 2 1 2 2 1 2 2 2 3 3 6 7 7 8 9 9 9 1 9 1 9 1 9 1 1 1 1 1 1 1 1 1 2 1 1 2 1 2 1 2 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 3 2 2 3 2 2 3 3 4 3 6 7 8 7 8 7 8 8 8 9 8 9 <						
Components	Туре	Value	<u>Form</u>			
Crystalline Silica (CAS 14808-60-7)	TWA	0.05 mg/m ³	Respirable dust.			
Calcium Carbonate (CAS 1317-65-3)	TWA	5 mg/m³ 10 mg/m³	Respirable fraction. Total dust.			

Exposure Guidelines: OSHA PELs, MSHA PELs, and ACGIH TLVs are 8-hr TWA values. NIOSH RELs are for TWA exposures up to 10-hr/day and 40-hr/wk. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Terms including "Particulates Not Otherwise Classified, "Particulates Not Otherwise Regulated," "Particulates Not Otherwise Specified," and "inert or Nuisance Dust" are often used interchangeably; however, the user should review each agency's terminology for differences in meanings.

- Appropriate engineering controls: Use ventilation and dust collection to control exposure to below applicable limits.
- Recommendations for personal protective measures:

Respirable dust and quartz levels should be monitored regularly to determine worker exposure levels. Exposure levels in excess of allowable exposure limits should be reduced by all feasible engineering controls, including (but not limited to) wet suppression, ventilation, process enclosure, and enclosed employee workstations.

Any special requirements for PPE:

Eye Protection: Safety glasses with side shields should be work as minimum protection. Dust goggles should be work when excessively (visibly) dusty conditions are present or anticipated.

Skin Protection: Use gloves to provide hand protection from drying dust and abrasion. In dusty conditions wear long sleeve shirt. Wash work clothes after each use.

Respiratory Protection: All respirators must be NIOSH-approved for the exposure levels present. (See NIOSH Respirator Selection Guide). The need for respiratory protection should be evaluated by a qualified safety and health professional. Activities that generate dust require the use of an appropriate dust respirator where dust levels exceed or are likely to exceed allowable exposure limits. For respirable silica levels that exceed or are likely to exceed an 8 hr Time Weighted Average (TWA) of 0.5 mg/m³, a high efficiency particulate filter respirator must be\ work at a minimum; however, if respirable silica levels exceed or are likely to exceed an 8 hr TW of 5.0 mg/m³ a positive pressure, full face respirator or equivalent is required. Respirator use must comply with applicable MSHA (42 CFR 84) or OSHA (29 CFR 1910.134) standards, which include provisions for a user training program, respirator, repair and cleaning, respirator fit testing, medical surveillance and other requirements.

Ventilation:Ensure adequate ventilation in working areaProtective Gloves:Chemical-resistant rubber gloves recommendedOther Equipment:Eye wash and safety shower in the work area

Work/Hygienic Practices: Avoid contact with eyes and skin, wash thoroughly after handling

SECTION 9: Physical & Chemical Properties

Appearance: Tan or brown granules **Vapor Pressure:** Not applicable Odor: Bland/Slight odor Vapor Density: Not applicable **Relative Density:** N/A

Odor Threshold: N/A

5.5 - 6.5 at 5% wt Solubility (ies): Soluble in water :Ha

Melting/Freezing Point: N/A Partition coefficient:

N/A **Boiling Point:** N/A **Auto-ignition Temperature:** 220°C Flash Point, F, COC N/A **Decomposition Temperature:** N/A **Evaporation Rate:** N/A Viscosity @25C: Not applicable

Flammability: N/A **Specific Gravity:** N/A

Flammable Limits: Not established

SECTION 10: Stability & Reactivity

Reactivity: Avoid contact with strong oxidizing agents

Chemical Stability: Stable

Hazardous Polymerization: Will not occur

Conditions to be Avoided:

Classes of Incompatible Materials: Ignites on contact with florine and other strong oxidizing agents

and is incompatible with acids, ammonium salts, and magnesium

metal. May cause pitting of aluminum.

Hazardous Decomposition Products: When heated in decomposition the organic components produce

> oxides of carbon and potentially toxic fumes and gases. When heated at 1100 - 1700°F, dolomitic limestone decomposes into

dolomitic quicklime releasing carbon dioxide gas.

SECTION 11: Toxicological Information

Routes of Exposure: Inhalation, Ingestion, eyes and skin contact

Delayed/Immediate/Chronic effects from short- and long-term exposure: N/A No applicable information is available **Numerical Measures of Toxicity: Description of Symptoms:** See Section 4. First Aid Measures

Listed in NTP Report on Carcinogens: Respirable crystalline silica has been classified by IARC and NTP

as a known human carcinogen, and classified by ACGIH as a

suspected human carcinogen.

Inhalation: Repeated inhalation of respirable crystalline silica (quartz) may

cause silicosis, a fibrosis (scarring) of the lungs. Silicosis is irreversible and may be fatal. Silicosis increases the risk of contracting pulmonary tuberculosis. Some studies suggest that repeated inhalation of respirable crystalline silica may cause other

adverse health effects including lung and kidney cancer.

Skin contact: May cause irritation through mechanical abrasion and drying.

Eye contact: May cause irritation through mechanical abrasion

Ingestion: Not likely, due to the form of the product.

Symptoms related to the physical, chemical, and toxicological characteristics: Dust from granules:

Discomfort in the chest. Shortness of breath. Coughing.

Information on toxicological effects:

Acute toxicity Not expected to be acutely toxic.

Skin corrosion/irritation This product is not expected to be a skin hazard Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation

Respiratory or skin sensitization:

Respiratory sensitization No respiratory sensitizing effects known. Skin sensitization Not known to be a dermal irritant or sensitizer Germ cell mutagenicity

No data available to indicate product or any components present

at greater than 0.1% are mutagenic or genotoxic

Carcinogenicity Respirable crystalline silica has been classified by IARC and NTP

as a known human carcinogen, and classified by ACGIH as a

suspected human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline Silica (Quartz) (CAS 14808-60-7) Respirable Tridymite and Cristobalite (other forms of Crystalline) (CAS Mixture) 1 Carcinogenic to humans.1 Carcinogenic to humans.

NTP Report on Carcinogens: Crystalline Silica (Quartz) (CAS 14808-60-7)

Known To Be Human Carcinogen

Reproductive toxicity

Not expected to be a reproductive hazard.

Specific target organ toxicity – single exposure Not classified

Specific target organ toxicity – repeated exposure Respirable crystalline silica: May cause damage to organs

(lung) through repeated exposure prolonged or repeated

exposure.

Aspiration hazard Due to the physical form of the product it is not an aspiration hazard.

Chronic effects Prolonged inhalation of respirable crystalline silica may be harmful. May cause damage to organs (lungs) through prolonged or repeated exposure. There are reports in the literature suggesting that excessive crystalline exposure may be associated with autoimmune disorders and other adverse health effects involving the kidney. In particular, the incidence of scleroderma (thickening of the skin caused by swelling and thickening of fibrous tissue) appears to be higher in silicotic individuals. To date, the evidence does not conclusively determine a causal relationship between silica exposure and these adverse health effect.

SECTION 12: Ecological Information

Environmental Impact: N/A

Ecotoxicity: Discharging granules into waters will release:

- Limestone and wood flour fines which may increase total suspended particulate (TSP) levels that can be harmful to certain aquatic organisms.
- Water soluble lignosulfonate (which is partially bidegradable) (BOD=0.14-0.26 lbs/lb of solids and COD = 0.49 0.91 lbs/lb of solids.)

Persistence and degradability: Wood flour and calcium lignosulfonate are partially bio-degradable. Dolomite stone dust will react slowly with acid soils and increase soil pH into ranges generally favorable to plant life.

Bioaccumulative potential: None Expected. No evidence is currently available on wood dust effects on plants and animals. Wood dust may contain compounds that are considered hazardous to aquatic organisms.

Mobility in soil: Not determined dolomite stone dust or wood flour. Calcium lignosulfonate is completely miscible in water.

Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, global warming potential) are expected from the ingredients in these granules.

SECTION 13: Disposal Considerations

Consult local, state, and federal regulations before disposing this material.

Disposal Instructions: Do not allow fine particulate matter to drain into sewers/water supplies. Do not

contaminate ponds, waterways or ditches with fine particulates. Dispose of contents in accordance with local/regional/national/international regulations.

Hazardous waste code: Not regulated

Waste from Residue / Unused Products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residue.

Contaminated Packaging: Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty packaging materials should be recycled or disposed of in accordance with applicable regulations and practices.

SECTION 14: Transport Information

UN Number:N/AEnvironmental Hazards:N/AUN Shipping Name:N/AGuidance on Transport in Bulk:N/ATransport Hazard Class:N/ASpecial Precautions:N/A

Packing Group Number: N/A

SECTION 15: Regulatory Information (Not intended to be all-inclusive.)

US Federal Regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) - Not Regulated

RCRA Hazardous Waste Number: Not Listed (40 CFR 261.33)

RCRA Hazardous Waste Classification (40 CFR 261): Not Classified

CERCLA Hazardous Substance List (40 CFR 302.4) Not Listed

CERCLA Reportable Quantity (RQ): not listed

SARA Hazard categories

Acute Health - Yes

Chronic Health - Yes

Fire hazard - Yes

Pressure hazard - No

Reactivity hazard - No

SARA 313 (TRI Reporting) - Not Regulated

SARA Toxic Chemical (40 CFR 372.65): not listed

SARA 302 (Extremely Hazardous Substance): Not Listed

OSHA Specifically Regulated Substance (29 CFR 1910): not listed.

Clean Air Act (CAA) Sections 112 - Hazardous Air Pollutants (HAP's) List - Not Regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) - Not Regulated

Canadian Regulations. Dolomite products containing crystalline silica and calcium carbonate are classified D2A and are subject to WHMIS requirements.

Additional State or Province regulations may be applicable. For Example:

US. Massachusetts RTK - Substance List

Crystalline Silica (Quartz) (CAS 14808-60-7)

Respirable Tridymite and Cristobalite (other forms of crystalline silica) (CAS Mixture)

US. New Jersey Worker and Community Right-to-Know Act

Crystalline Silica (Quartz) (CAS 14808-60-7)

Respirable Tridymite and Cristobalite (other forms of crystalline silica) (CAS Mixture)

US. Pennsylvania Worker and Community Right-to-know Law

Crystalline Silica (Quartz) (CAS 14808-60-7)

Respirable Tridymite and Cristobalite (other forms of crystalline silica) (CAS Mixture)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

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

US – California Proposition 65 – Carcinogens & Reproductive Toxicity (CRT): Listed substance Crystalline Silica (Quartz) (CAS 14808-60-7)

SECTION 16: Other Information

This TriCure Granular SDS was prepared January 12, 2023.

The information presented herein is believed to be factual, as it has been derived from the works of qualified experts; however, nothing contained in this SDS to be taken as a warranty. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.

MITCHELL PRODUCTS

1205 West Main Street ● Millville, NJ 08332 ● 866-436-0500