SAFETY DATA SHEET

SECTION 1

IDENTIFICATION

IDENTITY OF SUBSTANCE/MIXTURE: Trap Rock

RECOMMENDED USES: Road construction and landscaping aggregate, low-silica abrasive agent, ballast and roofing granules

SUPPLIER/MANUFACTURER'S NAME: Dresser Trap Rock, Inc. 1000 East Avenue Dresser, WI 54009

FOR EMERGENCY SOURCE INFORMATION Dresser Trap Rock: 715.483.3216 from 8:00AM CST to 5:00PM CST

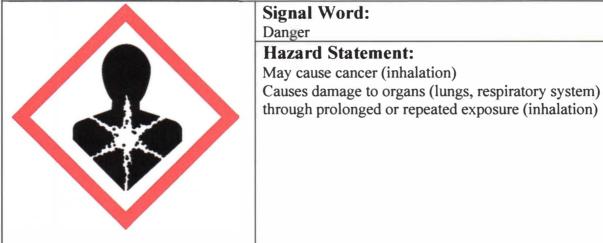
FOR NON-EMERGENCY PRODUCT & SDS INFORMATION: 800.537.3573

SECTION 2

HAZARD IDENTIFICATION

GHS Classification in accordance with 29 CFR 1910.1200		
Physical Hazards: Health Hazards:		
Not Classified as hazardous	Carcinogenicity – Category 1A	
	Specific target organ, repeated exposure - Category 1	

GHS Label Elements:



Precautionary Statement:

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.

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Response: If exposed or concerned: Get medical advice/attention.

Storage: Restrict access to stockpile areas. Do not walk on stockpiles. 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: Dispose of in accordance with local/regional/federal/international regulations. **Supplemental Information:** Respirable Crystalline Silica (RCS) may cause cancer. Trap rock is a naturally occurring mineral complex that contains varying quantities of quartz (crystalline silica). In its natural bulk state, trap rock is not a known health hazard. Trap rock may be subjected to various natural or mechanical forces that produce small particles (dust) which may contain respirable crystalline silica (particles less than 10 micrometers in aerodynamic diameter). Repeated inhalation of respirable crystalline silica (quartz) may cause lung cancer according to IARC and NTP; ACGIH states that it 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.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY OF SUBSTANCE: Crystalline Silica, Silicon Dioxide, Basalt

COMMON NAME(S), SYNONYM(S): Trap Rock, Crushed Rock

CASRN: Trap Rock: N/A Crystalline Silica (Quartz): 14808-60-7

MIXTURES: HAZARDOUS CHEMICAL IDENTITY	CONCENTRATION (OR RANGE)
Trap Rock	97.73%
Crystalline Silica (Quartz)	2.27%

SECTION 4 FIRST AID MEASURES

EMERGENCY OVERVIEW:

IMMEDIATE EFFECTS AND TREATMENT BY ROUTE OF EXPOSURE: INHALATION: Remove to fresh air. Dust in throat and nasal passages should clear spontaneously. Contact a physician if irritation persists or if breathing is difficult.

SKIN CONTACT: Trap rock dust: Wash off with soap and water. Get medical attention if irritation develops and persists.

EYE CONTACT: Trap rock dust: Immediately flush with plenty of water for at least 15 minutes. Hold eyelids apart. Occasionally lift the eyelid(s) to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from the eye(s). Get medical attention if irritation develops or

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persists.

INGESTION: Trap rock dust: Rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

DELAYED EFFECTS AND TREATMENT BY ROUTE OF EXPOSURE:

INHALATION: Inhaling dust may cause discomfort in the chest, shortness of breath, and coughing. Prolonged inhalation may cause chronic health effects. This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica liberated from this product can cause silicosis, and may cause cancer.

SKIN CONTACT: N/A

EYE CONTACT: N/A

INGESTION: N/A

GENERAL INFORMATION: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. 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

SUITABLE EXTINGUISHING MEDIA: Trap rock is not flammable. Use fire extinguishing media appropriate to surrounding fires.

FIRE AND EXPLOSION HAZARDS: No unusual fire or explosion hazards noted. Material is non-combustible.

PROTECTIVE EQUIPMENT FOR FIREFIGHTING: Use protective equipment appropriate for surrounding fires.

PRECAUTIONS FOR FIREFIGHTING: Basalt is generally non-flammable, but ignites on contact with powerful oxidizing agents and may cause fire and/or explosions.

SECTION 6 ACCIDENTAL RELEASE MEASURES

SUITABLE PROTECTIVE EQUIPMENT: See Section 8 for personal protection equipment.

ENVIRONMENTAL PRECAUTIONS: Avoid discharge of fine particulate matter into drains or water courses.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING: Use dustless methods (vacuum or wet methods) and place in closed container for disposal. Flush area with

water and do not dry sweep. Spilled material, where dust is generated, may overexpose cleanup personnel to respirable crystalline silica containing dust, use water to suppress dust generation.

SECTION 7 HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Minimize dust generation, use water vapor or spray. Do not breathe dust. Provide adequate ventilation and keep airborne concentrations below PEL. Keep equipment and work area clean. Maintain and test ventilation and dust collection equipment. Wash or vacuum clothing that becomes dusty.

CONDITIONS FOR SAFE STORAGE: Avoid dust accumulation or formation. Do not store or eat food/beverages in handling and processing areas.

INCOMPATIBLE STORAGE MATERIALS: Oxidizing agents

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS:

Component	OSHA/MSHA PEL	ACGIH TLV	NIOSH REL
Particulates not Otherwise Classified	15 mg/m ³ (total dust) 5 mg/mg ³ (respirable fraction)	10 mg/m ³ (inhalable fraction) 3 mg/m ³ (respirable fraction)	NE
Respirable Dust Containing Silica	$10 \text{ mg/m}^3 \div (\% \text{ silica} +2)$	Use Respirable Silica TLV	Use Respirable Silica REL
Total Dust Containing Silica	$30 \text{ mg/m}^3 \div (\% \text{ silica} +2)$	NE	NE
Respirable Crystalline Silica (Quartz)	NE – Use respirable dust PEL	0.025 mg/m ³	0.05 mg/m ³

Legend:

NE= Not Established; PEL = Permissible Exposure Limit; TLV – Threshold Limit Value; REL = Recommended Exposure Limit; OSHA – Occupational Safety and Health Administration; MSHA = Mine Safety and Health Administration; NIOSH – Nations Institute for Occupations Safety and Health; ACGIH = American Conference of Governmental Industrial Hygienists

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.

BIOLOGICAL LIMIT VALUES: N/A

ENGINEERING CONTROLS: When necessary, respirable dust, quartz, and fiber levels should be monitored regularly. Dust, quartz, and fiber levels in excess of appropriate exposure limits should be reduced by all feasible engineering controls including (but not limited to) wet

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suppression, ventilation, process enclosure, and enclosed employee workstations.

VENTILATION: Good general ventilation (typically 10 air changes per hour indoors) should be used. Ventilation rates should be matched to conditions.

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION: Safety glasses with side shields provide minimal protection and shall not be used in dusty conditions. Dust goggles should be worn when excessively dusty conditions are present or are anticipated.

EMERGENCY WASH FACILITIES: N/A

WORK HYGENIC PRACTICES: Wash dust exposed skin with soap and water before eating, drinking, smoking, or using toilet facilities. Wash clothes after each use.

SPECIAL PROTECTIVE CLOTHING: In dusty conditions, use long sleeve shirts and pants to prevent abrasion.

GLOVES: Use gloves to provide hand protection from abrasion.

RESPIRATOR: When handling or performing work with trap rock that produces dust or respirable crystalline silica in excess of applicable exposure limits, wear a NIOSH-approved respirator that is properly fitted and is in good condition. Respirators must be used in accordance with all applicable workplace regulations.

THERMAL HAZARD PROTECTION: Not anticipated. Wear appropriate thermal protective clothing, if necessary.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

TRAP ROCK MIXTURE:

APPEARANCE: Light to dark gray in color, fine grained stone. Granular.

ODOR: None

ODOR THRESHOLD: N/A

pH: N/A

MELTING/FREEZING POINTS: 1610°C

INITIAL BOILING POINT AND BOILING RANGE: 2230 °C

FLASH POINT: Non-combustible

EVAPORATION RATE: N/A

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FLAMMABILITY: N/A

UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: N/A

VAPOR PRESSURE: N/A

VAPOR DENSITY: N/A

SPECIFIC GRAVITY (H2O = 1): 2.98

SOLUBILITY(IES): Insoluble

PARTITION COEFFICIENT (n-octanol/water): N/A

AUTO-IGNITION TEMPERATURE: N/A

DECOMPOSITION TEMPERATURE: N/A

VISCOSITY: N/A

SECTION 10 STABILITY AND REACTIVITY

REACTIVITY: Not reactive under ordinary conditions.

CHEMICAL STABILITY: Stable under ordinary temperatures and pressures.

HAZARDOUS REACTIONS: None under normal use.

CONDITIONS TO AVOID: Highly stable under ordinary conditions. Avoid contact with incompatible materials such as strong oxidizers.

INCOMPATIBLE MATERIALS: Contact with powerful oxidizing agents; fluorine, chlorine trifluorine, manganese trifluoride, and oxygen trifluoride may produce fire and/or explosion hazards.

HAZARDOUS DECOMPOSITION PRODUCTS: Silica will dissolve in hydrofluoric acid and produce a corrosive gas – silicon tetrafluoride.

SECTION 11 TOXICOLOGY INFORMATION

ACUTE TOXICITY: Not classified. Quartz (14808-60-7) LD50 oral rat > 5000 mg/kg.

SKIN CORROSION/IRRITATION: Not classified.

SERIOUS EYE DAMAGE/IRRITATION: Not classified.

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RESPIRATORY OR SKIN SENSITIZATION: Not classified.

GERM CELL MUTAGENICITY: Not classified.

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.

REPRODUCTIVE TOXICITY: Not classified.

STOST-SINGLE EXPOSURE: Not classified.

STOST-REPEATED EXPOSURE: Respirable crystalline silica: May cause damage to organs (lung) through prolonged or repeated exposure (inhalation).

ASPIRATION HAZARD: Not classified.

ROUTES OF EXPOSURE AND EFFECTS IMMEDIATE EFFECTS ROUTE OF EXPOSURE:

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: Trap rock dust: May cause irritation through mechanical abrasion.

EYE CONTACT: Trap rock dust: May cause irritation through mechanical abrasion.

INGESTION: Not likely, due to the form of the product. However, accidental ingestion of the content may cause discomfort.

DELAYED EFFECTS BY ROUTE OF EXPOSURE:

INHALATION: Prolonged overexposure to respirable dusts in excess of allowable exposure limits can cause inflammation of the lungs leading to possible fibrotic changes, a medical condition known as pneumoconiosis.

Prolonged and repeated inhalation of respirable crystalline silica-containing dust in excess of allowable exposure limits may cause a chronic form of silicosis, an incurable lung disease that may result in permanent lung damage or death. Chronic silicosis generally occurs after 10 years or more of overexposure; a more accelerated type of silicosis may occur between 5 and 10 years of higher levels of exposure. In early stages of silicosis, not all individuals will exhibit symptoms (signs) of the disease. However, silicosis can be progressive, and symptoms can appear at any time, even years after exposure has ceased.

Repeated overexposures to very high levels of respirable crystalline silica for periods as short as six months may cause acute silicosis. Acute silicosis is a rapidly progressive, incurable lung disease that is typically fatal. Symptoms include (but are not limited to): shortness of breath, cough, fever, weight loss, and chest pain.

Respirable dust containing newly broken silica particles has been shown to be more hazardous to animals in laboratory tests than respirable dust containing older silica particles of similar size.

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Respirable silica particles which had aged for sixty days or more showed less lung injury in animals than equal exposures of respirable dust containing newly broken particles of silica. There are reports in the literature suggesting that excessive crystalline silica 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 effects.

SKIN CONTACT: None known

EYE CONTACT: None known

INGESTION: None known

SYMPTOMS OF EXPOSURE: Symptoms of silicosis caused by chronic exposure to dust may include (but are not limited to) shortness of breath, difficulty breathing with or without exertion; coughing; diminished work capacity; diminished chest expansion; reduction of lung volume; right heart enlargement and/or failure. Persons with silicosis have an increased risk of pulmonary tuberculosis infection.

TOXICITY DATA: N/A

INTERACTIVE EFFECTS: N/A

OTHER ADVERSE HEALTH EFFECTS: N/A

SECTION 12 ECOLOGICAL INFORMATION

SUMMARY OF EFFECTS: Not expected to cause ecological or environmental harm. Discharging dust to waters may increase total suspended particulate (TSP) levels that can be harmful to certain aquatic organisms.

TOXICITY: N/A

PERSISTENCE AND DEGRADABILITY: N/A

BIOACCUMULATIVE POTENTIAL: N/A

MOBILITY TO SOIL: N/A

OTHER ADVERSE EFFECTS: N/A

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DISPOSAL INFORMATION

SUMMARY: Disposal should be consistent with the requirement of the national competent authority. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to Section 8 (Exposure Controls and Personal Protection) of the SDS.

DISPOSAL CONTAINERS AND METHODS: May be landfilled. Cover to minimize generation of airborne dust. Pick up and reuse uncontaminated material. It is the responsibility of the user to determine, at the time of disposal, whether product meets criteria for hazardous waste. Product uses, transformations, mixture and processes, may render the resulting material hazardous.

PHYSICAL/CHEMICAL PROPERTIES THAT MAY AFFECT DISPOSAL OPTIONS: N/A

SPECIAL PRECAUTIONS FOR INCINERATION OR LANDFILL: N/A

SECTION 14 TRANSPORT INFORMATION

UN NUMBER: NOT REGULATED

UN PROPER SHIPPING NAME: NOT REGULATED

TRANSPORT HAZARD CLASS: N/A

PACKING GROUP: N/A

IMDG CODE: N/A

SECTION 15 REGULATORY INFORMATION

US FEDERAL REGULATIONS: Clean Air Act: ODS: N/A

TSCA STATUS: Crystalline silica (quartz) is listed on the TSCA Inventory.

CERCLA SECTION 103 (40 C.F.R. § 302.4): N/A

SARA SECTION 302 (40 C.F.R. § 355.30): N/A

SARA SECTION 304 (40 C.F.R. § 355.40): N/A

SARA (EPCRA) SECTION 313 (40 C.F.R. § 372.65): N/A

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40 C.F.R. § 370.21): CHRONIC HAZARD

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State Right to Know Law	Component	CASRN	Revision Date
Massachusetts	Quartz	14808-60-7	1994-04-01
Pennsylvania	Quartz	14808-60-7	1994-04-01
New Jersey	Quartz	14808-60-7	1994-04-01
California-WARNING! This product contains a chemical know to the state of California to cause cancer.	Quartz	14808-60-7	2007-09-28

SECTION 16 OTHER INFORMATION

SDS ORIGINAL PREPARATION DATE: May 20, 2016 SDS LATEST REVISION DATE: May 20, 2023 EXPLANATION OF LATEST REVISIONS: N/A

LEGEND/KEY OF TERMS USED ON SDS:

N/A = Not Applicable IARC = International Agency for Research on Cancer NTP = National Toxicology Program ACGIH = American Conference of Governmental Industrial Hygienists

KEY LITERATURE REFERENCES AND SOURCES FOR DATA USED TO COMPILE SDS:

- Appendix A TO 29 CFR §1910.1200—Health Hazard Criteria
- Concise International Chemical Assessment Document 24 CRYSTALLINE SILICA, QUARTZ
- IARC Monograph 100C-14
- US Department of Health and Human Services, NTP's Testing Status Agents: Silica, crystalline-quartz M920041
- US Department of Health and Human Services, NTP's 13th Edition Report on Carcinogens Silica, crystalline (respirable size)

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