



MATERIAL SAFETY DATA SHEET

Mulzer Crushed Stone, Inc. 6th & Mozart Streets P.O. Box 249 Tell City, IN 47586 Phone (812) 547-7921

I - IDENTIFICATION

CHEMICAL NAME Natural Sand or Gravel	CHEMICAL FORMULA Not Applicable	MOLECULAR WEIGHT Not Applicable
TRADE NAME Sand or Gravel		
SYNONYMS		DOT IDENTIFICATION NO. None

II - PRODUCT AND COMPONENT DATA

COMPONENT(S) CHEMICAL NAME	CAS REGISTRY NO.	%(Approx)	ACGIH TLV -TWA
Natural Sand* or Gravel*	None	100	See Section VI
*Quartz (crystalline silica) content typically greater than 1%	14808-60-7		

III - PHYSICAL DATA

APPEARANCE AND ODOR Angular or round multicolored particles. No odor.	SPECIFIC GRAVITY 2.55 - 2.80
BOILING POINT Not applicable	VAPOR DENSITY IN AIR (Air = 1) Not Applicable
VAPOR PRESSURE 0	% VOLATILE BY VOLUME 0%
EVAPORATION RATE 0	SOLUBILITY IN WATER Negligible

IV - REACTIVITY DATA

STABILITY Stable	CONDITIONS TO AVOID None Known
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INCOMPATIBILITY (Materials to avoid)

None Known

HAZARDOUS DECOMPOSITION PRODUCTS

None Known

HAZARDOUS POLYMERIZATION

Will not occur

V - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used)

Not Flammable

FLAMMABLE LIMITS IN AIR

Not Flammable

EXTINGUISHING AGENTS

None Required

UNUSUAL FIRE AND EXPLOSION HAZARDS

None Known

VI - TOXICITY AND FIRST AID

EXPOSURE LIMITS (When exposure to this product and other chemicals is concurrent, the TLV must be defined in the workplace.)

Exposure limits vary with the % Quartz in dust. All limits for 8-hr. TWA exposures.

Total Dust (ACGIH & MSHA) = $30\text{mg}/\text{M}^3 / (\% \text{Quartz} + 3)$; Total Dust (OSHA) = $30\text{mg}/\text{M}^3 / (\% \text{Quartz} + 2)$

Respirable Dust (ACGIH, MSHA, & OSHA) + $10\text{mg}/\text{M}^3 / (\% \text{Quartz} + 2)$

Effects described in this section are believed not to occur if exposures are maintained at or below appropriate TLVs.

Because of the wide variation in individual susceptibility, TLVs may not be applicable to all persons and those with medical conditions listed below.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Inhaling respirable dust may aggravate existing respiratory system disease(s) and/or dysfunctions.

Exposure to dust may aggravate existing skin and/or eye conditions.

ACUTE TOXICITY

Primary route(s) of exposure.

Inhalation

Skin Absorption

Ingestion

Exposure to dust may irritate respiratory system, eyes, and skin.

Use of natural sand and gravel for construction purposes is believed not to have caused acute toxic effects.

Exposure to quartz-containing dust in excess of appropriate TLVs during sandblasting and foundry operations has caused acute silicosis. Symptoms of acute silicosis may include (but are not limited to) shortness of breath, coughing, fever, and weight loss. Acute silicosis can occur in less than one year and can be fatal.

FIRST AID

Dust in eyes: Flush eyes with running water for 15 minutes. Contact a physician if irritation persists.

Dust on previously irritated skin: Wash with soap and water. Contact a physician if irritation is aggravated.

Dust inhalation: Remove to fresh air.

Dust in throat and nasal passages should clear spontaneously. Contact a physician if irritation persists.

Chronic exposure to respirable quartz-containing limestone dust in excess of appropriate TLVs has caused silicosis, a progressive pneumoconiosis.

Symptoms of Silicosis: Not all individuals with silicosis will exhibit symptoms (signs) of the disease. However, silicosis is progressive, and symptoms can appear at any time, even years after exposures have ceased. Symptoms of silicosis 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.

Sand and gravel are not listed as carcinogens on the NTP, IARC, or OSHA lists of carcinogens.

VII - PERSONAL PROTECTION AND CONTROLS

RESPIRATORY PROTECTION

NIOSH-MSHA approved dust respirators for conditions where dust levels exceed or are likely to exceed appropriate TLVs. Respirator use must comply with applicable standards, which include provisions for a user training program, respirator repair and cleaning, respirator fit testing, and other requirements. NIOSH-MSHA approved air-supplied hood must be used when sandblasting

VENTILATION

Local exhaust or general ventilation adequate to maintain exposures below appropriate TLVs.

SKIN PROTECTION

See "Hygiene" section below

EYE PROTECTION

Safety glasses with side shields should be worn as minimum protection. Dust goggles should be worn when excessively (visible) dusty conditions are present or are anticipated.

HYGIENE

Wash dust-exposed skin with soap and water. Wash work clothes after each use.

OTHER CONTROL MEASURES

Respirable dust levels should be monitored regularly. Dust levels in excess of appropriate TLVs should be reduced by all feasible engineering controls, including (but not limited to) wet suppression, ventilation, process enclosure, and enclosed employee work stations.

VIII - STORAGE AND HANDLING INSTRUCTIONS

Respirable dust may be generated during processing, handling, and storage. The controls identified in Section VII of the MSDS should be applied as appropriate.

This product is not recommended and should not be used for sandblasting, nor in foundry operations (or other operations during which dust is generated in excess of appropriate TLVs) unless and until fully adequate measures have been taken to reduce dust exposure levels below appropriate TLVs. The controls identified in Section VII of this MSDS should be applied as appropriate.

IX - SPILL LEAK AND DISPOSAL PRACTICES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Spilled materials, where dust can be generated, may overexpose cleanup personnel to respirable dust. Wetting of spilled material and/or use of respiratory protective equipment may be necessary.

WASTE DISPOSAL METHOD

Pickup and reuse clean materials. Dispose of waste materials only in accordance with applicable federal, state, and local laws and regulations.

X - TRANSPORTATION

DOT HAZARD CLASSIFICATION

None

PLACARD REQUIRED

None

LABEL REQUIRED

Label as required by applicable state and local regulations.

For Further Information:

Contact Gene Hurm
812-547-7921

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Gene Hurm - Safety Director

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NOTICE: Company believes that the information contained on this Material Safety Data Sheet is accurate. The suggested procedures are based on experience as of the date of publication. They are not necessarily all-inclusive nor fully adequate in every circumstance. Also, the suggestions should not be confused with nor followed in violation of applicable laws, regulations, rules, or insurance requirements.

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