

# **MATERIAL SAFETY DATA SHEET**

Effective Date: 05/01/2012 Replaces: 05/31/2009

# Crescent 3, 4, 7, 10, 17, 50

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION		
Product Name:	Formula:	
Crescent 3, 4, 7, 10, 17, 50	Not applicable	
Synonyms/Common Names:		
Limestone, Aggregate, Fluxing Agent, Ground Calcium Carbonate, Manufactured Sand, Mineral Filler, Screenings		
Manufacturer/Contact Info:	General Phone Number:	
Vulcan Materials Company and its subsidiaries and affiliates	1.866.401.5424	
1200 Urban Center Drive	Emergency Phone Number:	
Birmingham, AL 35242		
	1.866.401.5424 (3E Company, 24 hours/day, 7 days/week)	

SECTION 2. COMPOSITION INFORMATION ON INGREDIENTS		
Hazardous Components	CAS No.	% by Weight
Limestone* - predominantly calcium carbonate	1317-65-3	100
*Essentially crystalline silica free	14808-60-7	< 0.1

#### SECTION 3. HAZARDS IDENTIFICATION

#### **EMERGENCY OVERVIEW**

#### **CAUTION**

Dust may irritate the eyes, skin and respiratory tract. Avoid breathing excessive dust.

#### POTENTIAL HEALTH EFFECTS

#### Primary Routes of Exposure:

Eyes, skin, inhalation.

#### Eye Contact:

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

#### Skin Contact:

Dust particles can scratch and irritate the skin with redness, an itching or burning feeling, swelling of the skin, and/or rash.

#### Skin Absorption:

Not expected to be a significant exposure route following short-term exposure.

#### Inhalation:

Dusts may irritate the nose, throat and respiratory tract by mechanical abrasion. Coughing sneezing and shortness of breath may occur.

#### Ingestion:

Expected to be practically non-toxic. Ingestion of large amounts may cause gastrointestinal irritation including nausea, vomiting, diarrhea and blockage.

#### Effects Following Prolonged or Repeated Exposure:

Prolonged or repeated breathing of dust may cause chronic bronchitis.

#### Carcinogenicity:

Not listed.

## Signs and Symptoms of Exposure:

Chronic bronchitis is characterized by greater than normal amounts of mucous in the airways, along with coughing and shortness of breath.

# Medical Conditions Aggravated by Exposure:

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 4. FIRST AID MEASURES

#### Eyes

Immediately flush eye(s) with plenty of clean water for at least 15 minutes, while holding the eyelid(s) 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.

#### Skin:

Wash affected areas thoroughly with mild soap and fresh water. Contact a physician if irritation persists or later develops.

#### 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.

#### Ingestion:

If person is conscious, do not induce vomiting. Give large quantity of water and get medical attention. Never attempt to make an unconscious person drink.

#### Notes to Physician:

Not all individuals with silicosis will exhibit symptoms of the disease. However, silicosis can be progressive, and symptoms can appear at any time, even years after exposures have ceased. Persons with silicosis have an increased risk of pulmonary tuberculosis infection.

For emergencies, contact 3E Company at 1.866.401.5424 (24 hours/day, 7 days/week).

#### **SECTION 5. FIREFIGHTING MEASURES**

Flash Point (Method Used): Flammable Limits:

Not applicable UEL: Not applicable UEL: Not applicable

#### **Autoignition Temperature:**

Not applicable

#### Extinguishing Media:

The presence of this material in a fire does not hinder the use of any standard extinguishing medium. Use extinguishing medium for surrounding fire.

## **Special Firefighting Procedures:**

None

#### Unusual Fire and Explosion Hazards:

Contact with powerful oxidizing agents may cause fire and/or explosions (see Section 10 of MSDS).

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### Precautions if Material is Spilled or Released:

Persons involved in cleanup processes should first observe precautions (as appropriate) identified in Section 8 of this MSDS. Spilled material, where dust is generated, may overexpose cleanup personnel to respirable crystalline silica-containing dust. Do not dry sweep or use compressed air for clean-up. Wetting of spilled material and/or use of respiratory protective equipment may be necessary. Prevent spilled materials from entering streams, drains, or sewers.

For emergencies, contact 3E Company at 1.866.401.5424 (24 hours/day, 7 days/week).

#### Waste Disposal Methods:

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

## **Environmental Precautions:**

Not applicable

## **SECTION 7. HANDLING AND STORAGE**

#### Storage:

Do not store near food and beverages or smoking materials.

#### Handling:

Respirable crystalline silica-containing dust may be generated during processing, handling, and storage. Use personal protection and controls identified in Section 8 of this MSDS as appropriate.

#### MANUFACTURED SAND MADE FROM THIS PRODUCT MUST NOT BE USED AS AN ABRASIVE BLASTING AGENT.

#### SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

#### 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 = National Institute for Occupational Safety and Health; ACGIH = American Conference of Governmental Industrial Hygienists

Component	OSHA/MSHA PEL	ACGIH TLV	NIOSH REL
Limestone (Calcium Carbonate)	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)	10 mg/m³ (inhalable fraction)	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
Particulates not otherwise classified	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)	10 mg/m³ (inhalable fraction) 3 mg/m³ (respirable fraction)	NE

#### 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.

## Skin Protection (Protective Gloves/Clothing):

Use gloves to provide hand protection from abrasion. In dusty conditions, use long sleeve shirts. 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 worn at a minimum; however, if respirable silica levels exceed or are likely to exceed an 8 hr TWA 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 inspection, repair and cleaning, respirator fit testing, medical surveillance and other requirements.

#### **Engineering Controls:**

Activities that generate dust require the use of general ventilation, local exhaust and/or wet suppression methods to maintain exposures below allowable exposure limits.

#### Other

Respirable dust 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES			
Boiling Point:	pH:	Specific Gravity (H <sub>2</sub> O = 1):	
Not available	Not applicable	2.5	
Evaporation Rate (Butyl Acetate = 1):	Melting Point:	Vapor Pressure (mm Hg.):	
0	Not applicable	Not applicable	
Solubility in Water:	Vapor Density (Air = 1):	% Volatile:	
Negligible	Not applicable	0%	
Annearons and Oden			

#### Appearance and Odor:

Angular white and tan particles ranging in size from powder to boulders. No odor.

#### **SECTION 10. STABILITY AND REACTIVITY**

#### Stability:

Stable under normal temperatures and pressures.

#### **Conditions to Avoid:**

Contact with incompatible materials should be avoided (see below). See Sections 5 and 7 for additional information.

#### Incompatibility (Materials to Avoid):

Limestone ignites on contact with fluorine and is incompatible with acids, aluminum, ammonium salts and magnesium. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride yielding possible fire and/or explosions. Silica dissolves readily in hydrofluoric acid producing a corrosive gas - silicon tetrafluoride.

Hazardous Decomposition or Byproducts:	_
None.	
Hazardous Polymerization:	
Not known to occur.	

## **SECTION 11. TOXICOLOGICAL INFORMATION**

#### Acute Effects

No specific data on product. Material similar to limestone (calcium carbonate CAS# 471-34-1) has oral LD50 (rats) = 6450 mg/kg.

# Effects Following Prolonged or Repeated Exposure:

Prolonged or repeated breathing of dust may cause chronic bronchitis. Symptoms include greater than normal amounts of mucous in the airways, along with coughing and shortness of breath.

#### Carcinogenicity:

Limestone is not listed as a carcinogen by IARC, NTP or OSHA.

## **SECTION 12. ECOLOGICAL INFORMATION**

#### Aquatic Ecotoxicological Data:

No specific data on this product. Not expected to be toxic to aquatic organisms.

#### **Environmental Fate Data:**

No specific data on this product.

Other:

No specific data on this product.

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

Pickup and reuse clean materials. Dispose of waste materials in accordance with federal, state and local laws and regulations. It is the responsibility of the user to determine, at the time of disposal, whether product meets criteria for hazardous waste. Products uses, transformations, mixture and processes, may render the resulting material hazardous.

SECTION 14. TRANSPORT INFORMATION [Note: Not intended to be all-inclusive.]		
DOT Proper Shipping Name:	DOT Hazard Classification:	
Not regulated.	Not applicable.	
UN/NA Number:	DOT Packing Group:	
Not regulated.	Not applicable.	

# Labeling Requirements:

Not applicable. Label as required by the OSHA Hazard Communication standard [29 CFR 1910.1200(f)], MSHA Hazard Communication standard [30 CFR Part 47] and applicable state and local regulations.

# SECTION 15. REGULATORY INFORMATION [Note: Not intended to be all-inclusive.]

#### Toxic Substances Control Act (TSCA):

The components in this product are listed on the TSCA Inventory or are exempt.

## Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to state and local emergency planning committees under the Superfund Amendments and Reauthorization Act.

## Superfund Amendments and Reauthorization Act of 1986 (SARA), Title III:

Section 302 extremely hazardous substances:

None

#### Section 311/312 hazard categories:

Delayed Health

Section 313 reportable ingredients at or above de minimus concentrations:

None

#### California Proposition 65:

This product contains a chemical (crystalline silica) known to the State of California to cause cancer.

## State Regulatory Lists:

Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list or all state regulations. Therefore, the user should review the components listed in Section 2 and consult state or local authorities for specific regulations that apply.

## **SECTION 16. OTHER INFORMATION**

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Standard (29 CFR 1910.1200), the Mine Safety and Health Administration's (MSHA) Hazard Communication Standard (30 CFR Part 47), and/or any

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