

1. IDENTIFICATION

Product Identifier

Trade Name: Crushed Limestone

Recommended Uses: Limestone is used in the manufacture of bricks, mortar, cement, concrete, plasters, paving materials, other construction materials, steel, consumer goods, and other goods.

Recommended Restrictions: None Known

Manufacturer / Supplier:

Edward C. Levy Company
9300 Dix Ave.
Dearborn, Michigan 48120
Phone: 313-429-2200
www.edwclevy.com

Emergency telephone Number:

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Director of Technical Services
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2. HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

Physical hazards: Not Classified

Health Hazards:

Carcinogenicity Category 1A

Specific Target organ toxicity, repeated exposure: Category 2

OSHA defined hazards: Not Classified

Label Elements: GHS08 Health Hazard



GHS07 Caution



Signal Word: Danger

Hazard Statement: May cause cancer. May cause damage to organs (lung) through prolonged or repeated exposure.

Precautionary Statement

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves / protective clothing / eye protection / face protection.



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

Storage: 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: Disposal of contents/container in accordance with local/regional/national/international regulations.

Other Hazards: None Known

Supplemental Information: 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 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.

3. Composition / Information on Ingredients:

Mixtures:

Chemical Name	CAS Number	%
Calcium Carbonate	1317-65-3	>50
Crystalline Silica	14808-60-7	<0.1

4. First-Aid Measures

Inhalation: Limestone Dust: Move to fresh air. Call a physician if symptoms develop or persist.

Skin Contact: Limestone Dust: Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye Contact: Limestone Dust: Immediately flush with plenty of water for at least 15 minutes. Hold eyes apart. Occasionally lift the eye lid(s) to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from the eye(s). Get medical attention if irritation develops or persists.

Ingestion: Limestone Dust: Rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

Symptoms / Effects, acute and delayed: Prolonged inhalation may cause chronic health effects. This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica liberated from the product can cause silicosis and may cause cancer.

Indication of Immediate Medical Attention and Special Treatment Needed: Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

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 including disorders of the eye, skin, and lung (including asthma and other breathing



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disorders). If addicted to tobacco, smoking will impair the ability of the lungs to clear themselves of dust.

5. Fire-Fighting Measures

Suitable Extinguishing Media: Limestone is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable Extinguishing Media: None known.

Specific Hazards arising from the chemical: No unusual fire or explosive hazards noted.

Special Protective Equipment and Precautions for Firefighters: Use protective equipment appropriate for surrounding materials.

Fire Fighting Equipment / Instructions: No specific precautions.

Specific Methods: Contact with powerful oxidizing agents may cause fire and/or explosion (see section 10 of SDS).

General Fire Hazards: No unusual fire or explosion hazards noted.

6. Accidental Release Measures:

Personal Precautions and Emergency Procedures: Wear appropriate protective equipment and clothing during clean-up of materials that contain or may liberate limestone dust.

Methods and Materials for Containment and Clean-Up: Spilled material, where dust is generated, may overexpose 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.

Environmental Precautions: Avoid discharge of fine particulate matter into drains or water courses.

7. Handling and Storage:

Precautions for Safe Handling: Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid prolonged exposure. Provide adequate ventilation. Where appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for Safe Storage, Including any Incompatibilities: Avoid dust formation.



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8. Exposure controls / Personal protection:

Occupational exposure limits:

- 1- Value equivalent to OSHA formulas (29 CFR 1910.1000; 29 CFR 1917; 29 CFR 1918)
- 2- Value also applies to MSHA metal / Non-Metal (1972 TLV's at 39 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 (29CFR 1926.55 Appendix A) and shipyards (29 CFR 1915.1000, Table Z).
- 5- MSHA limit = 10 mg/m³.

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

Components	Type	Value	Form
Particulates not otherwise classified (CAS SEQ250)	PEL	5 mg/m ³	Respirable Fraction
		15 mg/m ³	Total Dust (4)
Calcium Carbonate (CAS 1317-65-3)	TWA	5 mg/m ³	Respirable Fraction (4)
		15 mg/m ³	Total Dust (5)

U.S. 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)
		0.1 mg/m ³	Respirable (1,2,3)
Tridomite and Cristobalite (other forms of crystalline silica) (CAS Mixture)	TWA	0.15 mg/m ³	Total Dust (1)
		0.05 mg/m ³	Respirable (1,2)
Particulates not otherwise classified (CAS SEQ250)	TWA	5 mg/m ³	Respirable Fraction (1)
		15 mg/m ³	Total Dust (1,4,5)

U.S. ACGIH Threshold Limit Values

Components	Type	Value	Form
Crystalline Silica (all Forms; CAS Mixture)	TWA	0.025 mg/m ³	Respirable Fraction
Particulates not otherwise classified (CAS Mixture)	TWA	3 mg/m ³	Respirable Particles (2)
		10 mg/m ³	Inhalable Particles (2)

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Crystalline Silica (all Forms; CAS Mixture)	TWA	0.05 mg/m ³	Respirable Dust
Calcium Carbonate (CAS 1317-65-3)	TWA	5 mg/m ³	Respirable Fraction
		10 mg/m ³	Total Dust

Biological Limit Values: No biological exposure limits noted for the ingredient(s).

Exposure Guidelines: OSHA PELs, MSHA PELs, and ACGIH TLVs are 8-hr TWA values. NIOSH RELs are for TWA exposure 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



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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: Good general ventilation (typically 10 air changes per hour indoors) 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 to an acceptable limit.

Individual Protection Measures, Such as personal protective equipment

Eye/Face Protection: Wear safety glasses with side shields (or goggles).

Skin Protection

Hand Protection: Use personal Protective Equipment as required.

Other: Use personal Protective Equipment as required.

Respiratory Protection: When handling or performing work with limestone 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 Hazards: Not anticipated. Wear appropriate thermal protective clothing, when necessary.

General Hygiene Considerations: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and Chemical Properties

Appearance

Physical State: Solid

Form: Solid, Particles

Color: Tan / Gray Brown

Odor: Not Applicable

Odor Threshold: Not Applicable

pH: 7 to 9

Melting Point/freezing point: Not Applicable

Initial Boiling Point and Boiling Range: Not Applicable

Flash Point: Non-Combustible

Evaporation Rate: Not Applicable

Flammability (solid, gas): Not Applicable

Upper/Lower Flammability or Explosive Limits

Flammability limit – lower (%): Not Applicable



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Flammability limit – upper (%): Not Applicable

Vapor Pressure: Not Applicable

Vapor Density: Not Applicable

Relative Density: Not Applicable

Solubility (ies)

Solubility (water): Insoluble

Partition coefficient (n-octanal/water): Not Applicable

Auto-ignition Temperature: Not Applicable

Decomposition Temperature: Not Applicable

Viscosity: Not Applicable

Other Information

Explosive Properties: Not Applicable

Flammability: Not Applicable

10. Stability and Reactivity

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical Stability: Material is stable under normal conditions.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

11. Toxicological Information:

Information on likely Routes 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 silica may cause other adverse health effects including lung and kidney cancer.

Skin Contact: Dust may cause irritation through mechanical abrasion.

Eye Contact: 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.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics: Dust may cause discomfort in the chest. Shortness of breath. Coughing.

Information on Toxicological Effects

Acute Toxicity: Not expected to be acutely toxic.

Skin Corrosion/Irritation: Not expected to be a skin hazard.



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Eye Damage/Irritation: Direct contact with the eyes may cause temporary irritation.

Respiratory Sensitization: No respiratory effects known.

Skin Sensitization: Not known to be a dermal irritant or sensitizer.

Germ Cell Mutagenicity: No data available to indicate product or any component present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenic Categories

IARC (International Agency for Research on Cancer): 14808-60-7, Quartz (SiO₂)

NTP (National Toxicology Program): 14808-60-7, Quartz (SiO₂)

OSHA-Ca (Occupational Safety & Health Administration): None of the ingredients are listed.

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 prolonged 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 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 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.

12. Ecological Information

Ecotoxicity: Not expected to be harmful to aquatic organisms. Discharging limestone dust and fines into waterways may increase total suspended particulate (TSP) levels that can be harmful to certain aquatic organisms.

Persistence and Degradability: Not Applicable

Bioaccumulative Potential: Not Applicable

Mobility in Soil: Not Applicable

Other Adverse Effects: No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, and global warming potential) are expected from this component.

13. Disposal Considerations

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.



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Waste from Residues/unused Products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its containers must be disposed of in a safe manner (See disposal Instructions).

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.

14. Transportation Information

DOT: Not regulated as dangerous goods.

IATA: Not regulated as dangerous goods.

IMDG: Not regulated as dangerous goods.

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not Applicable.

15. Regulatory Information

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

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not Listed

CERCLA Hazardous Substance List (40 CFR 302.4): Not Listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories: Immediate Hazard: No

Delayed Hazard: Yes

Fire Hazard: No

Pressure Hazard: No

Reactivity Hazard: No

SARA 302 Extremely Hazardous Substance: Not Listed

SARA 311/312 Hazardous Chemical: Yes

SARA 313 (TRI Reporting): Not Regulated

Other Federal Regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAP's) List: Not Regulated

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

Safe Drinking Water Act (SDWA): Not Regulated

16. Other Information

Issue Date: 07/02/2015



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Revision Date: 07/02/2015

Version # Original

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