

RECYCLED CONCRETE AGGREGATE

Material Safety Data Sheet

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Trade Name: **Crushed Concrete, Recycled Concrete**
 CAS Number: Mixture
 MSDS Number: Not Available
 Product Code: ND

SYNONYMS: Crushed Concrete, Recycled Concrete

MANUFACTURER: Aggregate & Dirt Solutions L.L.C.

TELEPHONE NUMBERS 301-636-6240

EMERGENCY NUMBER 301-636-6240 Mon - Fri 07:00 AM - 4:00 PM (In case of emergency seek medical attention immediately)

PRODUCT USE Crushed concrete is used as an aggregate in concrete or asphalt bases, concrete or asphalt mixes, flowable fill, as bulk fill material and other construction applications

NOTE This MSDS covers many concrete products. Individual composition of hazardous constituents will vary between types of crushed concrete.

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component	Percent (by weight)	CAS Number	OSHA PEL - TWA (mg/m ³)	ACGIH TLV TWA (mg/m ³)
Crystalline Silica	0-90	14808-60-7	0.3 mg/m ³ ** 0.1 mg/m ³ ***	0.5 mg/m ³ ***
Crushed Concrete	100	N/A	10 mg/m ³ ** 5 mg/m ³ **	10 mg/m ³ **
Portland Cement	0-10	65997-15-1	15 mg/m ³ ** 5 mg/m ³ **	10 mg/m ³ **

Total Dust, particulate not otherwise regulated

** Respirable Dust, PNOR

*** Total Silica

**** Respirable Silica

Concrete is a mixture of gravel or rock, sand, Portland cement and water. It may also contain fly ash, slag, silica fume, calcined clay, fibers (metallic or organic) and color pigment. Properties and composition of crushed concrete can vary depending on the original properties and composition of the recovered concrete. Natural sand includes quartz, a form of crystalline silica. Material may contain small percentages (less than 15%) of glass, porcelain or other ceramic materials.

3. HAZARDS IDENTIFICATION

Potential Health Hazards

Eye

- Airborne dust may cause immediate or delayed irritation or inflammation. Eye contact with large amounts of concrete dust can cause moderate eye irritation and abrasion. Eye exposures require immediate first aid and medical attention to prevent significant damage to the eye.

Skin

- Concrete dust may cause dry skin, discomfort, irritation and dermatitis.
- Dermatitis: Concrete dust, in association with sweat and friction, can lead to skin irritation and dermatitis. Skin affected by dermatitis may include symptoms such as, redness, itching, rash, scaling, and cracking. Irritant dermatitis is caused by the physical properties of concrete dust such as abrasion.

Swallowing

- Do not ingest concrete. Although ingestion of small quantities of concrete is not known to be harmful, large quantities can cause distress to the digestive tract.

Inhalation (acute)

- Breathing dust may cause nose, throat, or lung irritation, including choking, depending on the degree of exposure.

Inhalation (chronic)

- Prolonged and routine inhalation of respirable quartz dust can lead to lung disease known as Silicosis. Early symptoms of Silicosis include coughing, wheezing, shortness of breath, and an increased likelihood of other lung problems.

Cancer Information

- Concrete is not listed as a carcinogen by IARC or NTP; however, concrete contains trace amounts of crystalline silica which is classified by IARC and NTP as known human carcinogen.

Other Health Effects

- Individuals with lung disease (e.g. bronchitis, emphysema, COPD, pulmonary disease) can be aggravated by exposure.

4. FIRST AID MEASURES

EYE

Rinse Eyes thoroughly with water at least 15 minutes, including under lids to remove all particles. Seek medical attention for abrasions and burns.

SKIN

Wash with cool water and a pH neutral soap or a mild skin detergent. Seek medical attention for rash, irritation, dermatitis.

SWALLOWING

Do not induce vomiting. If conscious, have person drink plenty of water. Seek medical attention or contact poison control center immediately.

INHALATION

Move person to fresh air. Seek medical attention for discomfort or if coughing or other symptoms do not subside.

5. FIRE FIGHTING MEASURES

Flash Point -	Non-Combustible
Explosive Limit –	No Data
Auto-Ignition Temperature –	No Data
Hazardous Products of Combustion –	None
General Hazard –	Avoid Breathing Dust
Firefighting Equipment –	Crushed concrete does not pose a fire related hazard.

6. ACCIDENTAL RELEASE MEASURES

GENERAL

Place spilled material into a container. Avoid actions that cause the concrete dust to become airborne. Avoid inhalation of concrete dust. Wear appropriate protective equipment as described in Section 8.

WASTE DISPOSAL METHOD

Dispose or reuse crushed concrete according to Federal, State, Provincial and Local regulations. **Crushed Concrete is not classified as a hazardous waste.**

7. HANDLING & STORAGE

GENERAL

Ensure adequate load-bearing capacity of ground, floors or platforms when storing crushed concrete. Crushed concrete is heavy and pose risks such as sprains and strains to the back, arms, shoulders and legs during lifting. Handle with care and use appropriate control measures.

Engulfment hazard. To prevent burial or suffocation, do not enter a confined space, such as a silo, bin, bulk truck, or other storage contained or vessel that stores or contain crushed concrete. Dust can build up or adhere to the walls of a confined space. The dust can release, collapse or fall unexpectedly.

Do not stand on stockpiles of crushed concrete, they may be unstable. Use engineering controls (e.g. wetting stockpiles) to prevent windblown dust from stockpiles, which may cause the hazards described in Section 3.

USAGE

Cutting, crushing or grinding hardened cement, concrete or other crystalline silica-bearing materials will release respirable crystalline silica. Use all appropriate measures of dust control or suppression, and Personal Protective Equipment (PPE) described in Section 8 below.

HOUSEKEEPING

Avoid actions that cause the concrete dust to become airborne during clean-up such as dry sweeping or using compressed air. Use HEPA vacuum or thoroughly wet with water to clean up dust. Use PPE described in Section 8 below.

STORAGE TEMPERATURE

Unlimited

CLOTHING

Promptly remove and launder clothing that is dusty. Thoroughly wash skin after exposure to dust.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS

Use local exhaust or general dilution or other suppression methods to maintain dust levels below exposure limits.

EYE PROTECTION: PERSONAL PROTECTION EQUIPMENT (PPE)

Wear ANSI approved safety glasses or safety goggles when handling crushed concrete and when involved with activities that generate dust, to prevent eye contact with eyes. Wearing contact lenses when using crushed concrete, under dusty conditions, is not recommended.

SKIN PROTECTION: PERSONAL PROTECTION EQUIPMENT (PPE)

Wear gloves when handling crushed concrete. Remove clothing and protective equipment that becomes dusty and launder before reuse.

RESPIRATORY PROTECTION: PERSONAL PROTECTION EQUIPMENT (PPE)

Under ordinary conditions no respiratory protection is required. Wear a NIOSH approved respirator that is properly fitted and is in good condition when exposed to dust above exposure limits.

FOOT PROTECTION: PERSONAL PROTECTION EQUIPMENT (PPE)

Wear ANSI approved hard-toed safety boots when handling crushed concrete.

9. PHYSICAL & CHEMICAL PROPERTIES

ODOR AND APPEARANCE

Physical State:	Solid
Appearance:	Various colors and shapes
Odor:	None
Boiling Point:	NA
Specific Gravity:	2.5
Vapor Pressure:	NA
Vapor Density:	NA
Evaporation Rate:	NA
Solubility in Water:	INSOLUABLE
PH Value:	7 (in water)
Freezing Point:	NA
Viscosity:	NA

10. STABILITY & REACTIVITY

STABILITY / INCOMPATIBILITY

Stable

INCOMPATIBILITY

None

HAZARDOUS POLYMERIZATION

None

HAZARDOUS DECOMPOSITION

None

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA

ND

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

ND

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Dispose of waste and containers in compliance with applicable Federal, State, Provincial and Local Regulations.

14. TRANSPORT INFORMATION

This product is not classified as a Hazardous Material under U.S. DOT or Canadian TDG regulations.

15. REGULATION INFORMATION

OSHA/MSHA HAZARD COMMUNICATION

This product is considered by OSHA/MSHA to be a hazardous chemical and should be included in the employer's hazard communication program.

CERCLA/SUPERFUND

This product is not listed as a CERCLA hazardous substance.

EPCRA SARA TITLE III RATINGS

This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 and is considered a hazardous chemical and a delayed health hazard.

EPCRA SARA SECTION 313

This product contains none of the substances subject to reporting requirements of Section 313 of Title 111 of the

Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

RCRA

If discarded in its purchased form, this product would not be a hazardous waste either by listing or characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA

Concrete and crystalline silica are exempt from reporting under the inventory update rule.

CALIFORNIA PROPOSITION 65

Crystalline silica (airborne particulate of respirable size) is a substance known by the State of California to cause cancer.

16. OTHER INFORMATION

DISCLAIMER

NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. However, MSDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is not made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patent invention without a license. In addition, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.