Safety Data Sheet Recycled Base

Section 1. Identification

GHS product identifier: Other means of identification: Relevant identified uses of the substance or mixture and uses advised against:	Crushed Miscellaneous Base Recycled Base, RMB, Natural Sand, Gravel, Crushed Aggregate, Recycled Concrete and Asphalt Recycled Base is utilized for various fill, reclamation and other construction related applications.
Supplier's details:	300 E. John Carpenter Freeway, Suite 1645 Irving, TX 75062 (972) 653-5500
Emergency telephone number (24 hours):	CHEMTREC: (800) 424-9300
Section 2. Hazards Identif	ication
GHS Classification:	CARCINOGENICITY – Category 1A; H350

CARGINOGENICITY – Category 1A; H350 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) – Category 3; H335 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) – Category 1; H372 SKIN CORROSION/IRRITATION – Category 2; H315 SERIOUS EYE DAMAGE/EYE IRRITATION – Category 2A; H319

GHS label elements

Hazard pictograms:

Signal word: Hazard statements:

Precautionary statements: Prevention:

Response:

Storage:

Disposal:

Hazards not otherwise classified (HNOC):

Supplemental Information:



Danger May cause cancer. May cause damage to organs (lung) through prolonged or repeated exposure. Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Contaminated clothing must not be allowed out of the workplace. Wash any exposed body parts. Wear protective gloves/protective clothing/eye protection/face protection.

If exposed or concerned: Get medical advice/attention if skin irritation or rash occurs. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiosly with water for several minutes. Remove contact lenses, if present and easy to do.

Restrict or control access to stockpile areas (store locked up). 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 Recycled Based without an effective procedure for assuring safety.

Dispose of contents/container in accordance with local/regional/national/international regulations.

None known

Respirable Crystalline Silica (RCS) may cause cancer. Recycled Base is a mineral complex that may contain varying quantities of quartz (crystalline silica). In the product state, Recycled Base is not a known health hazard. Dust generated from being scooped, handled or otherwise moved may 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

CAS number/other identifiers

Substance/mixture: Recycled Base, earthen materials

Ingredient name	%	CAS number	
Natural Aggregate and Soil	Varies up to 100%	None	
Recycled Concrete	Varies up to 100%	None	
Recycled Asphalt	Varies up to 50%	None	
Crystalline Silica (Quartz)	> 1	14808-60-7	

Any concentration shown as a range is to protect confidentiality or is due to process variation. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. These materials are mined from the earth. Trace amounts of naturally occurring elements might be detected during chemical analysis of these materials.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye Contact:	Dust: Immediately flush with plenty of water for at least 15 minutes. Hold eyelids apart. Remove contacts is present and easy to do. 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 persists.
Inhalation: Skin Contact: Ingestion:	Dust: Move to fresh air. Call a physician if symptoms develop or persist. Dust: Wash off with soap and water. Get medical attention if irritation develops and persists. Dust: Rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms/effects, acute and delayed

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.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician:	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
Specific treatments:	Not Applicable
Protection of first-aiders:	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
General information:	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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media: Unsuitable extinguishing media: Specific hazards arising from the chemical: Hazardous thermal decomposition Products: Not flammable. Use fire-extinguishing media appropriate for surrounding materials. None known. No unusual fire or explosion hazards noted. Not a combustible dust.

None known

Special protective equipment for firefighters: General fire hazards:

Use protective equipment appropriate for surrounding materials. No specific precautions. Contact with powerful oxidizing agents may cause fire and/or explosions (see section 10 of SDS). No unusual fire or explosion hazards.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear appropriate protective equipment and clothing during clean-up of materials that contain or may liberate dust.

Methods and materials for containment, cleaning up and Environmental precautions

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. Avoid discharge of fine particulate matter into drains or water courses. Do not dry sweep broken, dusty material. Use water spray to minimize dust or vacuum with HEPA filters.

Section 7. Handling and storage

Precautions for safe handling

Protective measures: Advice on general occupational hygiene:	Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum if sawing, grinding or crushing. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Promptly remove dusty clothing and launder before reuse.
Conditions for safe storage, including any incompatibilities:	Avoid dust formation or accumulation.

Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits	
Particulates not otherwise classified (CAS SEQ250)	ACGIH TLV (United States, Canada) TWA: 3 mg/m ³ . Form: Respirable particles TWA: 10 mg/m ³ . Form: Inhalable particles OSHA PEL (United States) PEL: 5 mg/m ³ . Form: Respirable fraction PEL: 15 mg/m ³ . Form: Total dust MSHA PEL (United States) PEL: 5 mg/m ³ . Form: Respirable fraction PEL: 10 mg/m ³ . Form: Total dust	
Crystalline Silica (Quartz) (CAS 14808-60-7)	ACGIH TLV (United States) TWA: 0.025 mg/m ³ . Form: Respirable fraction OSHA PEL (United States) TWA: 0.05 mg/m ³ . Form: Respirable MSHA PEL (United States) TWA: 10/(%SiO2 + 2) in mg/m ³	
	 Provincial Exposure Limits (Canada, various) Alberta (OHS Code) 0.025 mg/m³ 8 hour TWA British Columbia (WorkSafeBC OHS Regulation) 0.025 mg/m³ 8 hour TWA British Columbia (Health, Safety & Reclamation Code, Mines Act) 0.1 mg/m³ 8 hour TWA Manitoba (Workplace Safety and Health Regulation) 0.025 mg/m³ 8 hour TWA Manitoba (Workplace Safety and Health Regulation) 0.025 mg/m³ 8 hour TWA Mew Brunswick 	

	 0.025 mg/m³ 8 hour TWA Newfoundland 0.025 mg/m³ 8 hour TWA Nova Scotia 0.025 mg/m³ 8 hour TWA Ontario (O. Reg 490/09; and O. Reg. 833) 0.1 mg/m³ 8 hour TWA Prince Edward Island 0.025 mg/m³ 8 hour TWA Quebec (Regulation Respecting OHS, Chapter S-2.1, r. 13) 0.1 mg/m³ 8 hour TWA Saskatchewan (OHS Regulations) 0.05 mg/m³ 8 hour TWA 		
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 when scooping, handling, moving or otherwise generating dust. If exposure limits have not been established, maintain airborne levels to an acceptable level.		
Exposure guidelines:	OSHA PELs, MSHA PELs, and ACGIH TLVs are 8-hr TWA values. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Terms including "Particulates Not Otherwise Classified," "Particulates Not Otherwise Regulated," Particulates Not Otherwise Specified," and "Inert or Nuisance Due" are often used interchangeably; however, the user should review each agency's terminology for differences in meanings.		
Biological limit values:	No biological exposure limits noted for the ingredient(s)		

Individual protection measures

Hygiene measures:	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.
Eye/face protection:	Wear safety glasses with side shields (or goggles).
Hand protection:	Use personal protective equipment as required.
Body protection:	Use personal protective equipment as required.
Other skin protection:	Use personal protective equipment as required.
Respiratory protection:	When handling or performing work 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 if necessary.

Section 9. Physical and chemical properties

Appearance

Physical State:	Solid, granular	Lower and Upper explosive flammable limits	Not applicable
Color:	Various colors, red, black, gray	Vapor pressure:	Not applicable
Odor:	Varies	Vapor density:	Not applicable
Odor threshold:	Not applicable	Relative density:	Not available
pH:	Not available	Solubility:	Not available
Melting point:	Not applicable	Solubility in water:	Not applicable
Boiling point:	Not applicable	Partition coefficient: n-octanol/water:	Not applicable
Flash point:	Non-combustible	Auto-ignition temperature:	Not applicable
Burning time:	Not applicable	Decomposition temperature:	Not applicable
Burning rate:	Not applicable	SADT:	Not available
Evaporation Rate:	Not applicable	Viscosity:	Not applicable
Flammability (solid, gas):	Not applicable	-	

Section 10. Stability and reactivity

Chemical Stability:Material is staPossibility of hazardous reactions:No dangerouConditions to avoid:Avoid contacIncompatible materials:Crystalline si	is stable and non-reactive under normal conditions of use, storage and transport. able under normal conditions s reaction known under conditions of normal use. t with strong oxidizing agents. lica may react violently with strong oxidizing agents, causing fire and explosions. es in hydrofluoric acid producing a corrosive gas-silicon tetrafluoride.
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Section 11. Toxicological information

Information on toxicological effects

Acute toxicity: Irritation/Corrosion:	Not expected to be acutely toxic. Skin: Dust: May cause irritation through mechanical abrasion. This product is not expected to be a skin hazard. Eyes: Direct contact with eyes may cause temporary irritation through mechanical abrasion. 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. Ingestion: Not likely due to product form. However accidental ingestion may cause discomfort.
Sensitization:	Respiratory sensitization: No respiratory sensitizing effects known. Skin sensitization: May cause sensitization due to the potential presence of trace amounts of hexavalent chromium from cement in concrete products.
Mutagenicity:	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Aspiration Hazard:	Not expected to be an aspiration hazard.
Reproductive toxicity:	Not expected to be a reproductive hazard.
Symptoms related to physical, chemical and toxicological	
characteristics: Carcinogenicity:	Dust: discomfort in the chest. Shortness of breath. Coughing. Respirable crystalline silica has been classified by IARC and NTP as a known human carcinogen, and classified by ACGIH as a suspected human carcinogen.

Product/ingredient name	OSHA	IARC	ACGIH	NTP
Crystalline Silica (Quartz) CAS 14808-60-7)	Listed	1 Carcinogenic to humans	A2	Known to be human Carcinogen

Specific target organ toxicity (acute exposure)

Name	Category	Route of Exposure	Target Organs
Crystalline Silica (Quartz) CAS 14808-60-7)	-	Inhalation	Not reported to have effects

Specific target organ toxicity (chronic exposure)

Name	Category	Route of Exposure	Target Organs
Crystalline Silica (Quartz) CAS 14808-60-7)		Inhalation	May cause damage to organs (lung through prolonged or repeated exposure.

Potential chronic health effects: General: 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 the 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.

Section 12. Ecological Information

Ecotoxicity

Not expected to be harmful to aquatic organisms. Discharging Recycled Base dust and fines into waters may increase total suspended particulate (TSP) levels that can be harmful to certain aquatic organisms.

Persistence and degradability: Bioaccumulative potential:	Not applicable. Not applicable.
Mobility in soil:	Not applicable.
Other adverse effects:	No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential,
	global warming potential) are expected from this component.

Section 13. Disposal considerations

Disposal methods:	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: Waste from residues/unused	Not regulated.
products:	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.
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.

Section 14. Transportation information

	DOT Classification	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	-	-	-
Canada TDG	-	-	-
Additional information	-	-	-

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Section 15. Regulatory Information

U.S. Federal regulations: OSHA Hazard Communication Standard, This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication 29 CFR 1910.1200 Standard, 29 CFR 1910.1200 **TSCA Section 12(b) Export Notification** (40 CFR 707, Subpart. D): Not regulated **OSHA Specifically Regulated** Substances (29 CFR 1910.1001-1050): Listed **CERCLA Hazardous Substance List (40** CFR 302.4): Not listed Clean Air Act Section 112 (b): Hazardous Air Pollutants (HAPs): Not regulated Clean Air Act Section 112 (r) Accidental Release Prevention (40 CFR 68.130): Not regulated Safe Drinking Water Act (SDWA): Not regulated **Canada Federal regulations: NSNR Status:** Listed on DSL or exempt

SARA 311/312

Classification: Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire Hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Crystalline Silica (Quartz) CAS 14808-60-7	>1	No	No	No	No	Yes

SARA 313 (TRI)

	Product name	CAS number	%
Form R-Report requirements	Crystalline Silica (Quartz)	14808-60-7	Not regulated

State regulations

Massachusetts RTK:	The following components are listed: Crystalline Silica (Quartz) (CAS 14808-60-7), Respirable Tridymite and Cristobalite (other forms of crystalline silica) (CAS Mixture)
New Jersey RTK:	The following components are listed: Crystalline Silica (Quartz) (CAS 14808-60-7), Respirable
Pennsylvania RTK:	Tridymite and Cristobalite (other forms of crystalline silica) (CAS mixture) The following components are listed: Crystalline Silica (Quartz) (CAS 14808-60-7), Respirable Tridymite and Cristobalite (other forms of crystalline silica) (CAS Mixture)
Rhode Island RTK:	Not regulated.

California Prop. 65

WARNING: This product contains crystalline silica and chemicals (trace metals) known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level	
Crystalline Silica (Quartz) CAS 14808-60-7	Yes	No	No	No	

International regulations

Ingredient name	CAS #	TSCA	Canada	WHMIS	EEC
Crystalline Silica (Quartz)	14808-60-7	Yes	DSL	D2A	EINECS

WHMIS Classification:

D2A "Materials Causing Other Toxic Effects"



Section 16. Other Information

Date of issue: Jan 01 2023 Replaces: Jan 01 2022 Revised Section(s):

Notice to reader

While the information provided in this safety data sheet is believed to provide a useful summary of the hazards of Recycled Base as it is commonly used, the sheet cannot anticipate and provide all of the information that might be needed in every situation. Inexperienced product users should obtain proper training before using this product. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with Recycled Base to produce Recycled Base products. Users should review other relevant material safety data sheets before working with this Recycled Base or working on Recycled Base products.

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Abbreviations

- ACGIH American Conference of Governmental Industrial Hygienists
- CAS Chemical Abstract Service
- CERCLA Comprehensive Emergency Response and Comprehensive Liability Act
- CFR Code of Federal Regulations
- DOT Department of Transportation
- GHS Globally Harmonized System
- HEPA High Efficiency Particulate Air
- IATA International Air Transport Association
- IARC International Agency for Research on Cancer
- IMDG International Maritime Dangerous Goods
- NIOSH National Institute of Occupational Safety and Health NOEC No Observed Effect Concentration
- NTP National Toxicology Program
- OSHA Occupational Safety and Health Administration
- PEL Permissible Exposure Limit
- REL Recommended Exposure Limit
- RQ Reportable Quantity
- SARA Superfund Amendments and Reauthorization Act
- SDS Safety Data Sheet
- TLV Threshold Limit Value
- TPQ Threshold Planning Quantity
- TSCA Toxic Substances Control Act
- TWA Time-Weighted Average
- UN United Nations