

SAFETY DATA SHEET

WORKING COPY



Date Prepared : 02/09/2016

SDS No : 2015-17

Crushed Rock - Limestone Gravel Alternative**1. PRODUCT AND COMPANY IDENTIFICATION****PRODUCT NAME:** Crushed Rock - Limestone Gravel Alternative**GENERAL USE:** Harsco Crushed rock is used in unpaved areas, driveways, walkways and livestock areas. It also is used as chip and seal material on roads, and as rip rap and drainage material.**PRODUCT DESCRIPTION:** Harsco CrushedRock is an aggregate made from carbon steel slag. The slag is screened to several sizes including large (8" x 3"), medium (3" x ¾"), small (¾" x 0), #2's, 2A Commercial, 2A Penndot, #3 AASHTO, #1 AASHTO, rip rap, oversized material, and dense grade aggregate (DGA).**CHEMICAL FAMILY:** CAS No. 65996-71-6. Slag from carbon steel production. Mixture of Ca - Mg - Fe - Al silicates and oxides.**MANUFACTURER**

Harsco Metals
300 Seven Fields Blvd.
Suite 300
Seven Fields, PA 16046

Emergency Contact: Aggregate Sales Manager**Customer Service:** 724-741-6600**E-Mail:** pmazzarella@harsco.com**24 HR. EMERGENCY TELEPHONE NUMBERS**

855-393-9889

Access Code 13793

2. HAZARDS IDENTIFICATION**GHS CLASSIFICATIONS****Health:**

Acute Toxicity 4 H332 Harmful if inhaled, skin.

Irritant 2 H315 Causes skin irritation.

STOT SE 3 H335 May cause respiratory irritation.

Eye Irritant 2B H320 Causes eye irritation.

GHS LABEL

The substance is classified and labeled according to the Globally Harmonized System (GHS).



Exclamation
mark

SIGNAL WORD: WARNING**HAZARD STATEMENTS**

Harmful if inhaled.

Causes skin and eye irritation. May cause respiratory irritation.

PRECAUTIONARY STATEMENTS**General:**

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area. Wear protective gloves.

Wash thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a poison center/doctor if you feel unwell.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If on skin: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

Store in a well-ventilated place.

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Steelmaking Slags	100	65996-71-6

COMMENTS:

COMPOSITION/INFORMATION ON INGREDIENTS

Larnite, beta-dicalcium-silicate [Beta - Ca_2SiO_4]

Srebrodolskite, calcium-iron-oxide [$\text{Ca}_2\text{Fe}_2\text{O}_5$]

Brownmillerite, calcium-aluminum-iron-oxide [$\text{Ca}_2\text{AlFeO}_5$]

Spinel [$\text{Me}_2+\text{Me}_3+2\text{O}_5$]

Wuestite, Solid solution of iron (II)-oxide with MgO and MnO

Gehlenite, calcium-aluminum-silicate [$\text{Ca}_2\text{Al}_2\text{SiO}_7$]

Bredigite, calcium-magnesium-silicate

4. FIRST AID MEASURES

EYES: If contact with eyes occurs, flush with water for 15 minutes, occasionally lifting upper and lower lids. Consult a physician.

SKIN: Using cool water and a pH neutral soap, wash skin surfaces that have been in contact with the material. Seek medical attention for rashes, burns, irritated skin or prolonged exposures.

INGESTION: Rinse mouth thoroughly if ingested. Do not induce vomiting. If discomfort continues, consult a physician.

INHALATION: Move to fresh air. Dust in throat and nasal passages should clear spontaneously. If discomfort continues, consult a physician.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

CHRONIC EFFECTS: Symptoms of poisoning may occur after several hours; therefore medical observation should be performed for at least 48 hours after exposure.

NOTES TO PHYSICIAN: Treat symptomatically.

COMMENTS: Show this Safety Data Sheet to physician in attendance.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: This product is non-combustible.

GENERAL HAZARD: None known

EXTINGUISHING MEDIA: Use fire-extinguishing media appropriate for surrounding materials.

FIRE FIGHTING PROCEDURES: Move product containers from fire area if it can be done without risk. Cool containers by flooding with water until heat is dissipated.

HAZARDOUS DECOMPOSITION PRODUCTS: None known

6. ACCIDENTAL RELEASE MEASURES

LARGE SPILL: Avoid runoff into storm sewers and ditches. Collect spillage using appropriate equipment. Dispose of collected materials in accordance with Federal, State and local regulations.

GENERAL PROCEDURES: Pick up spilled material using vacuums or wet sweeping to minimize dusting. Avoid using compressed air.

RELEASE NOTES: In the unused form, the material is non-hazardous as defined in state and federal regulations.

COMMENTS: Spillage into water may result in an elevated pH level. Do not attempt to wash spillage into sewers or storm water drains.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Normal temperature and pressure do not affect material. Avoid runoff into storm sewers and ditches.

HANDLING: If stored in a stockpile under dry and windy conditions, apply water to avoid dust formation.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields. Use tight fitting goggles if dust is generated.

RESPIRATORY: None required if material is wet. If dry, ventilate to maintain air quality below OELs. If adequate ventilation is not available, use a NIOSH-approved N95 dust mask or a respirator with particulate filters to prevent inhalation of dusts.

PROTECTIVE CLOTHING: Wear hard hats, protective clothing and hard toed shoes to protect from impact and abrasion. In conditions where splashing water will occur, impervious PPE should be worn to protect the skin.

WORK HYGIENIC PRACTICES: Wash hands after handling. Routinely wash work clothing and protective equipment. Handle in accordance with good industrial hygiene and safety practice.

OTHER USE PRECAUTIONS: Immediately remove all soiled and contaminated clothing, and launder before reuse. Wash hands before breaks and at end of work. Avoid contact with the eyes and skin.

COMMENTS: Occupational exposure limits (OELs) are as follows:

ACGIH TLV's for Nuisance Dusts	
Total Dust:	10 mg/m ³ <1% quartz (max)
Respirable Dust:	5 mg/m ³ <1% quartz (max)

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: None

COLOR: Grey colored granular solid or aggregate.

pH: 10 to 12

SOLUBILITY IN WATER: Low solubility in water; can raise pH of water to values of 11 to 12 due to alkaline nature.

DENSITY: 85 to 125 lbs/cu ft. Varies with gradation. Contact customer service for density of a specific product.

COMMENTS: For additional information contact manufacturer.

10. STABILITY AND REACTIVITY

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

CONDITIONS TO AVOID: Unintended mixing with water can result in elevated pH.

POSSIBILITY OF HAZARDOUS REACTIONS: None

HAZARDOUS DECOMPOSITION PRODUCTS: None known

INCOMPATIBLE MATERIALS: Strong acids.

COMMENTS: Changes in moisture content can alter the density of the material resulting in expansion or contraction. The material should not be placed under buildings and permanent structures where movement would be constricted.

11. TOXICOLOGICAL INFORMATION

ACUTE

ORAL LD₅₀: > 2000 mg/kg

EYE EFFECTS: May cause eye irritation.

SKIN EFFECTS: May cause skin irritation.

CARCINOGENICITY

IARC: Carbon steel slag (CAS No. 65996-71-6) is not listed by IARC.

NTP: Carbon steel slag (CAS No. 65996-71-6) is not listed by the National Toxicology Program in their Annual Report.

OSHA: Carbon steel slag (CAS No. 65996-71-6) is not listed by NIOSH on their Occupational Cancer List.

Notes: May contain crystalline silica, which is classified by IARC as carcinogenic to humans (Group 1). NTP has characterized respirable silica as "known to be a human carcinogen".

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

ECOTOXICOLOGICAL INFORMATION: This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

BIOACCUMULATION/ACCUMULATION: This product is not bioaccumulating.

DISTRIBUTION: Not Available

AQUATIC TOXICITY (ACUTE): None known

CHEMICAL FATE INFORMATION: Not Available

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose in accordance with all applicable regulations.

GENERAL COMMENTS: TCLP testing of unused product indicates that it is not hazardous waste by characteristic.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

OTHER SHIPPING INFORMATION: Unused product is not regulated as a hazardous material by DOT.

COMMENTS: Unused product is not regulated as dangerous goods by the International Air Transport Association (IATA), International Maritime Dangerous Goods (IMDG) or Transport Canada (TDG).

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Hazardous Chemical.

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** No **CHRONIC:** Yes

313 REPORTABLE INGREDIENTS: Manganese, Concentration Range: 3 - 8%.

TITLE III NOTES: Does not contain Extremely Hazardous Substances.

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: None

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: None

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Steelmaking Slags	65996-71-6

CLEAN AIR ACT

40 CFR PART 68---RISK MANAGEMENT FOR CHEMICAL ACCIDENT RELEASE PREVENTION: None

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

29 CFR1910.119---PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS: None

CALIFORNIA PROPOSITION 65: WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

RCRA STATUS: Not regulated.

OSHA HAZARD COMM. RULE: Regulated.

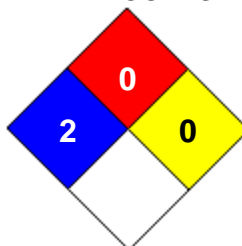
16. OTHER INFORMATION

Date Prepared: 02/09/2016

HMIS RATING

HEALTH		2
FLAMMABILITY		0
PHYSICAL HAZARD		0
PERSONAL PROTECTION		B

NFPA CODES



MANUFACTURER DISCLAIMER: Proper and safe use of the material is solely the purchaser's responsibility. The manufacturer extends no warranties and makes no representations as to the suitability of the product for the purchaser's intended purpose or the consequences of purchaser's actions.