

# SAFETY DATA SHEET



Date Prepared : 11/11/2015

SDS No : 2015-15

## Mill Scale

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Mill Scale

**GENERAL USE:** Mill Scale is used as an ingredient in the production of cement, metallurgical products, counter-weights and iron fertilizers.

**PRODUCT DESCRIPTION:** Steelmaking mill scale is composed predominantly of oxides of iron with trace amounts of other metals and inorganic salts. The precise composition changes with feedstock and steel manufacturing procedures. Depending upon the source and handling practices, oil & grease may be present in small quantities.

**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:**

Not Classified.

**Environmental:**

Not Classified.

**Physical:**

Not Classified.

**GHS LABEL**

**HAZARD STATEMENTS**

**PRECAUTIONARY STATEMENTS**

**Prevention:**

Wear protective gloves/protective clothing/eye protection/face protection.

P264: Wash hands thoroughly after handling.

**Disposal:**

Dispose of unused material in accordance with local/regional/national regulations.

**EMERGENCY OVERVIEW**

**IMMEDIATE CONCERNS:** Harsco Mill Scale is a granular metallic product consisting of the scale removed from carbon steel.

Short-term exposures are not likely to cause serious harm.

**POTENTIAL HEALTH EFFECTS**

**EYES:** Exposure to dust may cause mechanical or chemical irritation, tearing, redness and pain. Dust contains calcium oxide that may cause severe irritation or permanent damage to the tissues of the eye.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Iron	< 73	7439-89-6
Calcium Oxide	< 4	1305-78-8
Silica, Amorphous	< 4	60676-86-0
Manganese Oxide	< 2	1317-35-7
Silica, Crystalline	0 - 1	14808-60-7
Oil & Grease	0 - 2	N/A

### 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:** Wash skin surfaces that have been in contact with the material. Apply a skin lotion if redness persists.

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

**INHALATION:** Move to fresh air. If discomfort continues, consult a physician.

**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 appropriate methods to minimize dusting.

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

### 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****EXPOSURE GUIDELINES**

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Iron	TWA		10 as iron oxide fume		5 R
Calcium Oxide	TWA		5		2
Silica, Amorphous	TWA	20 millions of particles per ft <sup>3</sup>	80 / %SiO <sub>2</sub>		10 mg/m <sup>3</sup> for inhalable particles and 3 mg/m <sup>3</sup> for respirable particles
Manganese Oxide	STEL		5 C as manganese fume		
Silica, Crystalline	TWA		Respirable PEL = 10 mg/m <sup>3</sup> / (%SiO <sub>2</sub> + 2) and Total Dust PEL = 30 mg/m <sup>3</sup> / (%SiO <sub>2</sub> + 2)		0.025 R

**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 OSHA and ACGIH standards. 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:** Use normal work clothing. Wear gloves to prevent direct skin contact.

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

**COMMENTS:** 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.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**ODOR:** None

**SOLUBILITY IN WATER:** Low solubility in water.

**DENSITY:** Approximately 155 lbs/cu ft.

**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.

**POSSIBILITY OF HAZARDOUS REACTIONS:** None

**HAZARDOUS DECOMPOSITION PRODUCTS:** None known

**INCOMPATIBLE MATERIALS:** Strong acids.

**11. TOXICOLOGICAL INFORMATION**

**EYE EFFECTS:** May cause eye irritation.

**SKIN EFFECTS:** May cause skin irritation.

**CARCINOGENICITY**

**Notes:** May contain metal compounds at trace levels that have been classified as carcinogens.

**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.

**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
Iron	7439-89-6
Calcium Oxide	1305-78-8
Silica, Amorphous	60676-86-0
Manganese Oxide	1317-35-7
Silica, Crystalline	14808-60-7

**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: 11/11/2015

**HMIS RATING**

<b>HEALTH</b>	<input type="text" value="0"/>	<b>0</b>
<b>FLAMMABILITY</b>	<input type="text" value="0"/>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<input type="text" value="0"/>	<b>0</b>
<b>PERSONAL PROTECTION</b>	<input type="text" value="B"/>	<b>B</b>

**NFPA CODES**