

# SAFETY DATA SHEET



Date Prepared : 11/11/2015

SDS No : 2015-16

## AgrowSil Pro

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** AgrowSil Pro

**PRODUCT DESCRIPTION:**

Harsco Minerals AgrowSil™ Pro is a calcium silicate agricultural liming material using carbon steel slag as a raw material.

**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 AgrowSil™ Pro is a light to dark grey powder sold in bulk form. Short-term exposures are not likely to cause serious harm. Elevated pH in moist conditions may cause irritation to the skin and eyes, or aggravate existing conditions. Dust can cause irritation of the respiratory system or may aggravate existing respiratory system disease.

**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
Steelmaking Slags	100	65996-71-6
Calcium Oxide	23 - 40	1305-78-8
Iron Oxides (Includes CAS No.'s 1345-25-1 and 1309-38-2)	19 - 40	1309-37-1
Magnesium Oxide	4 - 15	1309-48-4
Manganese Oxide	0.1 - 1	1317-35-7
Calcium Fluoride	0.1 - 2	7789-75-5
Phosphorus Pentoxide	0.1 - 1.5	1314-56-3
Titanium Dioxide	0.3 - 0.6	13463-67-7
Silica, Crystalline	0.1 - 1	14808-60-7

**COMMENTS:**

This product is a complex mixture of iron oxides, metallic silicates (iron, calcium, magnesium and aluminum silicates), including: Dicalcium Silicate ( $\text{Ca}_2\text{SiO}_4$ ) CAS No. 14284-23-2, Dicalcium Ferrite ( $\text{Ca}_2\text{Fe}_2\text{O}_5$ ) CAS No. 12013-62-6, Merwinite ( $\text{Ca}_3\text{MgSi}_2\text{O}_8$ ) CAS No. 13813-64-4, and Gehlenite ( $\text{Ca}_2\text{Al}_2\text{SiO}_7$ ) CAS No. 1302-56-3, crystalline silica, magnesium oxide, manganese oxide, calcium oxide, phosphorus pentoxide, calcium fluoride and titanium oxide. Listed above is a partial listing of the components that comprise this product.

**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 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:** Follow Safety Data Sheet and label precautions.

**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>
Calcium Oxide	TWA		5		2
Iron Oxides (Includes CAS No.'s 1345-25-1 and 1309-38-2)	TWA		10 as iron oxide fume		5
Magnesium Oxide	TWA		15 as magnesium oxide fume		10 l
Manganese Oxide	STEL		5 C as manganese fume		
Titanium Dioxide	TWA		15		10
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

**COLOR:** Grey colored powder.

**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:** Approximately 125 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.

**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.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

**ORAL LD<sub>50</sub>:** > 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.

#### 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
Calcium Oxide	1305-78-8
Iron Oxides (Includes CAS No.'s 1345-25-1 and 1309-38-2)	1309-37-1
Magnesium Oxide	1309-48-4
Manganese Oxide	1317-35-7
Calcium Fluoride	7789-75-5
Phosphorus Pentoxide	1314-56-3
Titanium Dioxide	13463-67-7
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

HEALTH	<input type="checkbox"/>	1
FLAMMABILITY	<input type="checkbox"/>	0
PHYSICAL HAZARD	<input type="checkbox"/>	0
PERSONAL PROTECTION	<input type="checkbox"/>	B

### NFPA CODES

