

## Magruder 241141 Phosphate Rock

*results due December 15, 2024*

*Suggested analytes to analyze:*

*Total P (%), Available P (%), Ca (%), Mg (%), As (ppm), Cd (ppm), Cr (ppm), Co (ppm), Pb (ppm), Hg (ppm), Mo (ppm), Ni (ppm), Se (ppm), Cu (%) and Zn (%)*

*The units above are those required for reporting data from this Magruder sample. They may not be the units required on a commercial fertilizer label.*

*Note: This Magruder Check Sample material is not to be used in the manufacture of products nor applied to any crops or for other fertilizer uses. It is intended for analytical testing purposes only.*

**SDS for this product can be found at:**

<https://www.magruderchecksample.org/SDS/241141GuarSDS.pdf>

# SDS for Magruder 241141

SECTION 1	PRODUCT AND COMPANY IDENTIFICATION
Trade Name:	Phosphate Rock
Chemical Name:	Carbonate- Fluorapatite
CAS Number:	12415-02-0
Chemical Family:	Minerals
Synonyms:	Phos Rock Wet Rock Florida Land Pebble Francolite
Primary Use:	Raw Material in the Production of Phosphate Fertilizers
Company Information:	THE MOSAIC COMPANY 3033 Campus Drive Plymouth, MN 55441 www.mosaicco.com 800-918-8270 or 763-577-2700 8 AM to 5 PM Central Time US
Emergency Telephone:	<b>EMERGENCY OVERVIEW</b> <b>24 Hour Emergency Telephone Number:</b> <b><u>For Chemical Emergencies:</u></b> <b>Spill, Leak, Fire or Accident</b> <b>Call CHEMTREC</b> <b>North America: (800) 424-9300 (reference CCN201871)</b> <b>Others: (703) 527-3887 (collect)</b>

SECTION 2	HAZARD IDENTIFICATION
GHS Classification:	Not Classified
	<b>Signal Word: n/a</b> <b>Hazard Statement(s)</b> Not Applicable
Label Elements:	
Prevention:	Not Applicable
Response:	Not applicable
Storage:	Not applicable
Disposal:	Not applicable

SECTION 3	COMPOSITION INFORMATION ON INGREDIENTS								
Formula:	Ca <sub>5</sub> (PO <sub>4</sub> ) <sub>3</sub> (F,Cl,OH)								
Composition:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Carbonate - Fluorapatite</td> <td style="width: 16.5%;">CAS 12415-02-0</td> <td style="width: 16.5%;">60-90%</td> <td style="width: 34%;">Not applicable</td> </tr> <tr> <td>Silica as SiO<sub>2</sub></td> <td>CAS 7631-86-9</td> <td>2.5-5%</td> <td></td> </tr> </table>	Carbonate - Fluorapatite	CAS 12415-02-0	60-90%	Not applicable	Silica as SiO <sub>2</sub>	CAS 7631-86-9	2.5-5%	
Carbonate - Fluorapatite	CAS 12415-02-0	60-90%	Not applicable						
Silica as SiO <sub>2</sub>	CAS 7631-86-9	2.5-5%							

<b>SECTION 4</b>		<b>FIRST AID MEASURES</b>	
First Aid Procedures:	Eyes:	May cause irritation due to mechanical action. Rinse eye with water to remove dust or grit.	
	Skin:	Prolonged or repeated contact may dry skin and cause irritation. Avoid contact with skin and clothing. Wash thoroughly after handling.	
	Inhaled:	Move victim to fresh air. Administer oxygen if breathing is difficult.	
	Ingestion:	Rinse mouth. Obtain medical attention immediately if ingested.	
Note to Physician:	All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.		

<b>SECTION 5</b>		<b>FIRE FIGHTING MEASURES</b>	
Extinguishing Media:	Use extinguishing agent suitable for type of surrounding fire. Avoid excessive water to minimize runoff. Prevent firefighter water from entering the environment. Small fires: Water spray, foam, dry chemical or CO <sub>2</sub> Large fires: Water spray, fog or foam		
Protection of Firefighters:	Positive pressure, self-contained breathing apparatus is required.		

<b>SECTION 6</b>		<b>ACCIDENTAL RELEASE MEASURES</b>	
Response Techniques:	Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. As an immediate precautionary measure use appropriate personal protective equipment (PPE). Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Keep unauthorized personnel away.		

<b>SECTION 7</b>		<b>HANDLING AND STORAGE</b>	
Handling:	Use only with adequate ventilation. Minimize dust generation and accumulation. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing dust. Avoid contact with skin, eyes, and clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.		
Storage:	Keep container closed. Store in a dry, well-ventilated place.		

<b>SECTION 8</b>		<b>EXPOSURE CONTROLS / PERSONAL PROTECTION</b>	
Engineering Controls:	Good general ventilation 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. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure that dust handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is not leakage from the equipment).		

Personal Protective Equipment (PPE):	Eye/Face:	Wear safety goggles.	
	Skin:	Wear appropriate gloves. Wear long sleeves and/or protective coveralls.	
	Respiratory:	For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.	
	Other:	A source of clean water should be available in the work area for flushing eyes and skin.	
General Hygiene Considerations:	Wash thoroughly after handling Use adequate ventilation		
Exposure Guidelines:	OSHA Permissible Exposure Limits (PEL):	Silica (Quartz): $\frac{10 \text{ mg} / \text{m}^3}{\% \text{SiO}_2 + 2}$	
	ACGIH Threshold Limit Value (TLV):	Silica (Quartz): 0.025 mg/m <sup>3</sup> TWA	

<b>SECTION 9</b>	<b>PHYSICAL AND CHEMICAL PROPERTIES</b>
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Note: Unless otherwise stated, values in this section are determined at 20°C (68°F) and 760 mm Hg (1 atm).

Appearance:	Multicolored pebble or fine granules	Vapor Pressure (mm Hg):	Not applicable
Odor:	None	Vapor Density (air=1):	Not applicable
Odor Threshold:	No data available	Specific Gravity or Relative Density:	2.9 – 3.1 MT/m <sup>3</sup>
Physical state:	Solid	Bulk Density:	Loose 80 - 150 lbs/ft <sup>3</sup>
pH:	Not applicable	Solubility in Water:	Less than 1%
Melting Point/ Freezing Point:	Not applicable	Partition coefficient:	No data available
Boiling Point:	Not applicable	Auto-Ignition Temperature:	Not applicable
Flash Point:	Not applicable	Decomposition Temperature:	Not applicable
Evaporation Rate:	No data available	Viscosity:	No data available
Flammability:	Not applicable	Volatility:	Not applicable
Upper/Lower Flammability or explosive limits	Not applicable		

<b>SECTION 10</b>	<b>STABILITY AND REACTIVITY</b>
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Chemical Stability:	Stable under normal conditions of storage and handling.
Conditions to Avoid:	Excess heat.
Incompatible Materials:	Avoid contact with strong acids, will cause the release of toxic and irritating fluoride and Pox gases.
Hazardous Decomposition Products:	If heated to the point of decomposition, fumes of phosphorus oxides and fluorides may be released.
Corrosiveness:	Not applicable.

Hazardous Polymerization:	Will not occur
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<b>SECTION 11</b>		<b>TOXICOLOGICAL INFORMATION</b>	
Substance:	Carbonate - Fluorapatite		
Acute Oral Toxicity:	No data available		
Acute Inhalation Toxicity:	No data available		
Acute Dermal Toxicity:	No data available		
Substance:	Silica as SiO <sub>2</sub>		
Acute Oral Toxicity:	No data available		
Acute Inhalation Toxicity:	No data available		
Acute Dermal Toxicity:	No data available		
Mutagenesis:	No data available	Target Organ	No data available
Developmental Toxicity:	No data available	Carcinogenicity	No data available

<b>SECTION 12</b>		<b>ECOLOGICAL INFORMATION</b>	
Ecotoxicology:	No data available		

<b>SECTION 13</b>		<b>DISPOSAL CONSIDERATIONS</b>	
		Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.	

<b>SECTION 14</b>		<b>TRANSPORT INFO</b>	
Regulatory Status:	Not regulated		
Identification Number:	HTS 2510.10.00 or 2510.20.00		
Hazard Class:	Not applicable		
Proper Shipping Name	Not applicable		
Packing Group	Not applicable		
DOT Emergency Response Guide Number:	Not applicable		
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Not applicable		
MARPOL Annex V:	Non-HME		
IMO/IMDG:	Not applicable		

<b>SECTION 15</b>		<b>REGULATORY INFORMATION</b>	
CERCLA:	Not listed		
RCRA 261.33:	Not listed		

SARA Title III: (Exemptions at 40 CFR, Part 370 may apply for agricultural use, or for quantities of less than 10,000 pounds on-site.)	Section 302/304: Not listed	RQ: No	TPQ: No		
	Section 311/312:				
	Acute: Yes	Chronic: No	Fire: No	Pressure: No	Reactivity: No
	Section 313: Not listed				
NTP, IARC, OSHA:	This material has not been identified as a carcinogen by NTP, IARC, or OSHA.				
Canada DSL and NDSL:	DSL: Yes NDSL: Not listed				
TSCA:	Listed on the TSCA Inventory				
CA Proposition 65: (Health & Safety Code Section 25249.5)	 WARNING: Cancer and Reproductive Harm – <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>				
WHMIS:	<b>WHMIS 2015</b> This SDS has been prepared according to the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all of the information required by the HPR.				

SECTION 16	OTHER INFORMATION
Disclaimer:	The information in this document is believed to be correct as of the date issued. <b>HOWEVER, MOSAIC MAKES NO GUARANTEE, REPRESENTATION, OR WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE REGARDING THE ACCURACY OR COMPLETENESS OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO THE USE OF THIS PRODUCT.</b> User is responsible for determining whether this product is fit for a particular purpose and suitable for user's method of use or application and assumes the risk of use thereof. The conditions and use of this product are beyond the control of Mosaic, and Mosaic disclaims any liability for loss or damage incurred in connection with the use or misuse of this product. Each user should review the recommended industrial hygiene and safe handling procedures in the specific context of the intended use and determine whether they are appropriate.
Preparation:	The preparation of this SDS was in accordance with ANSI Z400.1-2010.
Revision Date:	December 31, 2018
Sections Revised:	4, 6, 15, 16
SDS Number:	MOS 200007
References:	Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4 <sup>th</sup> Edition 2011 OSHA Hazard Communication Standard, 2012 MARPOL Annex V; The Fertilizer Institute (TFI), 2003; TOXNET

Other Hazard Classifications:	<b>NFPA HAZARD CLASS</b>		<b>HMIS HAZARD CLASS</b>		<b>WHMIS 1988 (CPR) HAZARD CLASS</b>	
	Health:	1	Health:	1	Symbol	N/A
	Flammability:	0	Flammability:	0	Classification	Not WHMIS Controlled
	Instability:	0	Physical Hazard:	0	Sub Class	N/A
	Special Hazard:	None	PPE:	Section 8		
	<b>WHMIS 2015 (HPR) HAZARD CLASS</b>					
	Signal Word	Not applicable				
	Symbol	Not applicable				
	Classification	Not applicable				
	Hazard Statements	Not applicable				

# SDS for Magruder 241111

## Section 1

### Identification of the Substance and of the Supplier

Product Name/Identification:	SUL4R-PLUS®
Synonyms:	Gypsum, Flue Gas Desulfurization (FGD) Gypsum, Calcium Sulfate Dihydrate
Recommended Use:	Agricultural amendment, plant nutrient and soil conditioner
Restrictions on Use:	Applicability for certain crops and soil types should be verified with state and local agricultural extension agents
Manufacturer:	SUL4R-PLUS, LLC
Address:	P.O. Box 581368 Louisville, KY 40268
Website:	<a href="http://SUL4R-PLUS.com">http://SUL4R-PLUS.com</a>
Phone:	866-576-6660
Emergency phone number:	866-576-6660

## Section 2

### Hazards Identification

#### 2.1 Classification of the Substance

**GHS Classification(s) according to OSHA Hazard Communication Standard (29 CFR 1910.1200):**

Not Classified

*While this product is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and use of the product. This SDS should be retained and available for employees and other users of this product.*

#### 2.2 Label Elements

**Labeling according to OSHA Hazard Communication Standard (29 CFR 1910.1200):**

No Hazard Pictograms, Signal Word or Precautionary Statements are applicable to this product.

#### 2.3 Other Hazards

None known. Product incorporates dust control agent that mitigates the presence of respirable dust.

**Section 3**  
**Composition/Information on Ingredients**

Chemical Name	CAS Number	Amount by Weight %	Hazard Classification
Synthetic Gypsum (calcium sulfate dihydrate)	10101-41-4	90-95%	Specific Target Organ Toxicity- Single Exposure (Respiratory Effects)
Ammonium Lignosulfonate (stabilizer)	8061-53-8	4-8%	Eye Irritant Category 2B Skin Irritant Category 2

**Section 4**  
**First Aid Measures**

**4.1 Description of First Aid Measures**

<b>Inhalation:</b>	If product is inhaled and irritation of the nose or coughing occurs, remove person to fresh air. Get medical advice/attention if respiratory symptoms persist.
<b>Ingestion:</b>	No specific first aid measures are required.
<b>Skin Contact:</b>	If contact with skin occurs, wash thoroughly with neutral soap and water. Seek medical advice/attention if skin irritation, skin rashes or dermatitis develop.
<b>Eye Contact:</b>	If the material gets into the eye, flush the eye under running water for at least 15 minutes. If easy to do, remove contact lenses and continue to flush with water. Seek medical advice/attention if irritation persists.

**4.2 Most Important Health Effects, Both Acute and Delayed**

**Acute Effects:**

None known.

**Chronic Effects:**

None known.

**4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed**

Seek first aid or call a doctor or Poison Control Center if contact with product occurs and symptoms remain.

## Section 5 Firefighting Measures



NFPA Rating:

<b>Suitable Extinguishing Media:</b>	This product is not flammable or combustible. Use extinguishing media appropriate for fighting surrounding fire.
<b>Unsuitable Extinguishing Media:</b>	Not applicable, the product is not flammable or combustible.
<b>Special Protective Equipment and Precautions for Firefighters:</b>	As with any fire, wear self-contained breathing apparatus (NIOSH approved or equivalent) and full protective gear.
<b>Specific Hazards:</b>	This product poses no fire-related hazard.
<b>Hazardous Combustion Products:</b>	Above 1450°C this product can produce sulfur dioxide and calcium oxide (SO <sub>2</sub> and CaO).

## Section 6 Accidental Release Measures

<b>Personal Precautions:</b>	None required.
<b>Protective Equipment:</b>	Use personal protective equipment as recommended in Section 8. For airborne concentrations exceeding Occupational Exposure Levels (OELs), use a self-contained breathing apparatus (SCBA).
<b>Emergency Procedures:</b>	Contain spill area and protect from pedestrian or vehicle traffic. Use scooping, water spraying/flushing/misting or ventilated vacuum cleaning systems to clean up spills. Do not use pressurized air.
<b>Methods and Materials for Containment and Cleaning Up:</b>	Avoid generating dust. Shovel up spilled material and place in suitable container. Prevent contamination of drains or waterways. Dispose in accordance with federal, state/provincial and local requirements.

## Section 7 Handling and Storage

### Precautions for Safe Handling and Storage:

Practice good housekeeping. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Wash or vacuum clothing that has become dusty. Avoid eating, smoking, or drinking while handling the material.

## Section 8

### Exposure Controls/Personal Protection

#### 8.1 Control Parameters

Chemical Name	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )	NIOSH REL TWA (mg/m <sup>3</sup> )	CA-OSHA PEL (mg/m <sup>3</sup> )
Gypsum (calcium sulfate); based on Particles not otherwise regulated (PNOR): Total Dust	15	-	10	10
Gypsum (calcium sulfate) based on PNOR: Respirable Fraction	5	-	5	5

#### 8.2 Exposure Controls

##### 8.2.1 Engineering Controls

No specific controls required. Ventilate to keep airborne concentrations below exposure limits. Use of an enclosed tractor cab with particulate air filtration can reduce the risk of inhaling dusts and soils during application.

##### 8.2.2 Personal Protection Equipment (PPE)

**Skin Protection:** Wear gloves and protective clothing. Wash hands with soap and water after contact with material.

**Eye Protection:** If eye contact is possible, wear protective glasses with side shields. Avoid contact lenses.

**Respiratory Protection:** Use only with adequate ventilation/personal protection. OSHA Regulations (29 CFR 1910.134 - Respiratory Protection) must be followed whenever work conditions require a respirator. A NIOSH approved particulate respirator is recommended when engineering controls are not feasible, or while engineering controls are being instituted, and if an OSHA PEL or ACGIH TLV is exceeded.

**Personal Hygiene:** Work clothing should be washed regularly. Wash hands before eating, drinking, or using tobacco products. Wash exposed skin with soap and water.

## Section 9

### Physical and Chemical Properties

Property	Value	Property	Value
Appearance (physical state, color, etc.):	Granular; tan/brown/light gray	Upper/lower flammability or explosive limits:	Not Applicable
Odor:	None	Vapor Pressure:	Not Applicable

<b>Odor threshold:</b>	Not Applicable	<b>Vapor Density:</b>	Not Applicable
<b>pH:</b>	≤ 9 but may be as low as 4 in solution	<b>Specific gravity or relative density:</b>	2.19 g/cc
<b>Melting point/freezing point:</b>	Not Applicable	<b>Solubility(ies):</b>	Soluble in water
<b>Initial boiling point and boiling range:</b>	Not Applicable	<b>Partition coefficient: n-octane/water:</b>	Not Applicable
<b>Flash point:</b>	Not Applicable	<b>Auto ignition temperature:</b>	Not Applicable
<b>Evaporation rate:</b>	Not Applicable	<b>Decomposition temperature:</b>	1450°C
<b>Flammability (solid, gas):</b>	Not Applicable	<b>Viscosity:</b>	Not Applicable
<b>Physical state:</b>	Solid	<b>Corrosivity towards steel:</b>	0.56 millimeters per year

## Section 10 Stability and Reactivity

<b>Reactivity:</b>	Avoid contact with strong acids and strong oxidizers.
<b>Chemical Stability:</b>	Stable in dry environments.
<b>Possibility of hazardous reactions:</b>	Contact with strong acids could result in release of carbon dioxide.
<b>Conditions to avoid:</b>	Contact with incompatible materials (see below).
<b>Incompatible materials:</b>	Strong acids, aluminum (at high temperatures), diazomethane.
<b>Hazardous decomposition products:</b>	No hazardous decomposition up to 1450°C. Above 1450°C it could decompose to calcium oxide (CaO) and releases sulfur dioxide (SO <sub>2</sub> ) and various carbon oxides.

## Section 11 Toxicological Information

**Note:** No specific data are available for the product as a whole, so this information pertains to calcium sulfate dihydrate which composes 90-95% of the product.

### Carcinogenicity

None known.

## **Animal Data (Calcium Sulfate Dihydrate)**

### **Acute Oral Toxicity**

Species: Rat (Sprague-Dawley)

Route of Administration: Oral (gavage)

Method: OECD Test Guideline 420 (Acute Oral Toxicity-Fixed dose procedure)

2,000 mg/kg body weight of test substance was administered to 4 female rats during main study (50, 300 and 2,000 mg/kg body weight administered during sighting study).

No mortality, no specific clinical signs observed during test period.

LD50 (Lethal Dose): > 2,000 mg/kg body weight

### **Skin Irritation**

Species: Rabbit (New Zealand White)

Test Type: *In vivo*

Method: OECD TG 404 (1991) "Acute Dermal Irritation/Corrosion"

Exposure Period: 4 hours; 500 mg/site/rabbit

No erythema, no eschar and no edema (score of zero under OECD method: grading of skin reaction) was observed at the skin on the backs of three rabbits during test period.

Result: Not irritating

### **Skin Sensitization**

Species: Guinea pig (Hartley)

Test Type: Buehler test

Method: OECD TG 406 (1991) "Skin Sensitization"

Exposure Period: hours/week for 3 consecutive weeks; 0.4 grams/site/guinea pig was applied topically with an occluded patch to the backs of 40 male guinea pigs. After 6 hours, the material was removed and the skin was examined using the sensitization grading system.

Result: Not sensitizing

**No acute inhalation toxicity, acute dermal toxicity, corrosiveness/irritation, or eye irritation corrosion studies are available for calcium sulfate dihydrate. Mutagenicity studies and Reproduction / Developmental Toxicity Screening Tests were negative.**

## **Section 12 Ecological Information**

### **12.1 Toxicity**

No data available on final product.

### **12.2 Persistence and Degradability**

Not relevant for inorganic materials.

### **12.3 Bioaccumulative Potential**

No data available.

### **12.4 Mobility in Soil**

No data available.

### **12.5 Results of PBT and vPvB Assessment**

No data available.

### **12.6 Other Adverse Effects**

None known.

## Section 13 Disposal Considerations

See Sections 7 and 8 above for safe handling and use, including appropriate hygienic practices.

Recover or recycle if possible. Disposal should be in accordance with applicable local, regional, and national laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

## Section 14 Transport Information

UN number: Not classified as a hazardous material by U.S. Department of Transportation (DOT) regulations.

UN proper shipping name: Not applicable.

Transport hazard class(es): Not applicable.

Packing group, if applicable: Not applicable.

## Section 15 Regulatory Information

- TSCA Inventory Status

All components of this product are listed on the TSCA Inventory or are exempt from TSCA Inventory requirements.

- California Proposition 65

Regulatory information: This product is not labeled for sale or use in the State of California, thus no Proposition 65 declarations are required.

- State Right-to-Know (RTK) status

Component	CAS	MA <sup>1,2</sup>	NJ <sup>3,4</sup>	PA <sup>5</sup>	RI <sup>6</sup>
Gypsum; calcium sulfate; calcium sulfate, dihydrate	7778-18-9 OR 10101-41-4	Yes	Yes	Yes	No

<sup>1</sup>Massachusetts Department of Public Health, no date

<sup>2</sup>189<sup>th</sup> General Court of The Commonwealth of Massachusetts, no date

<sup>3</sup>New Jersey Department of Health and Senior Services, 2010a

<sup>4</sup>New Jersey Department of Health, 2010b

<sup>5</sup>Pennsylvania Code, 1986

<sup>6</sup>Rhode Island Department of Labor and Training, no date

## Section 16

### Other Information, Including Date of Preparation or Last Revision

Date of preparation or last revision: January 2016

#### Acronyms and Abbreviations

- ACGIH: American Conference of Industrial Hygienists
- CA: California
- CAS: Chemical Abstract Services
- CFR: Code of Federal Regulations
- FGD Flue Gas Desulfurization
- GHS: Globally Harmonized System of Classification and Labelling
- IARC: International Agency for Research on Cancer
- LC50: Concentration resulting in the mortality of 50 % of an animal population
- LD50: Dose resulting in the mortality of 50 % of an animal population
- MA: Massachusetts
- NA: Not Applicable
- NFPA National Fire Protection Association
- NIOSH: National Institute of Occupational Safety and Health
- NJ: New Jersey
- OECD Organization for Economic Cooperation and Development
- OEL: Occupational Exposure Limit
- OSHA: Occupational Safety and Health Administration
- PA: Pennsylvania
- Pa: Paschal
- PBT: Persistent, Toxic and Bioaccumulative
- PEL: Permissible exposure limit
- PNOR Particles not otherwise regulated
- PPE: Personal Protective Equipment
- REL: Recommended exposure limit
- RI: Rhode Island
- RTK: Right-to-Know
- SCBA: Self-contained breathing apparatus
- SDS: Safety Data Sheet
- STOT-RE: Specific target organ toxicity-repeated exposure
- STOT-SE: Specific target organ toxicity-single exposure
- TLV: Threshold limit value
- TSCA: Toxic Substances Control Act
- TWA: Time-weighted average
- U.S.: United States
- U.S. DOT: United States of Department of Transportation
- vPvB Very Persistent and Very Bioaccumulative

## DISCLAIMER

The information contained herein is intended as a guide to the handling of the material and it has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling by the end user may result in additional exposure considerations that cannot be foreseen by the manufacturer. The information contained herein is derived from sources we believe to be reliable. No warranty of any kind is given or implied and the manufacturer will not be liable for any damages, losses, injuries or consequential damages which may result from the use of or reliance on any information contained herein.

**SUL4R-PLUS fertilizer is covered by U.S. Pat. 9,873,638 B2 and U.S. Pat. 9,919,977 B2; CA Patent No. 2,881,403**

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