

# Safety Data Sheet

Issue Date: 06-May-2020

Revision Date: 07-May-2020

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** Pillar 15 (2-0-1)

### Other means of identification

**SDS #** GRPR-033

### Recommended use of the chemical and restrictions on use

**Recommended Use** Agricultural use only.

### Details of the supplier of the safety data sheet

#### **Supplier Address**

Plant Health Intermediate DBA Douglas Plant Health  
1550 E Old 210 Hwy  
Liberty, MO 64068

### Emergency telephone number

**Company Phone Number** (914) 428-1316  
**Emergency Telephone** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Physical state** Liquid

### Classification

This SDS was created using the criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and is compliant with the Globally Harmonized System of Labeling and Classification of Chemicals (GHS).

Serious eye damage/eye irritation	Category 2
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### Signal Word

Warning

### Hazard statements

Causes serious eye irritation



### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection

### Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention

**Other hazards**

Harmful to aquatic life

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical name	CAS No	Weight-%
Sodium Nitrate	7631-99-4	30-40
Zinc sulfate heptahydrate	7446-20-0	<1.0

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

**4. FIRST AID MEASURES****Description of first aid measures**

<b>Eye Contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
<b>Inhalation</b>	Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician/poison center if individual's condition declines or if symptoms persist.
<b>Ingestion</b>	Rinse mouth. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Call a poison center or doctor/physician if you feel unwell.

**Most important symptoms and effects, both acute and delayed**

<b>Symptoms</b>	Causes serious eye irritation. May be harmful if swallowed. May cause skin irritation. May cause nausea, vomiting, stomach ache, and diarrhea.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Sodium Nitrite is an oxidizing agent and can initiate combustion of other materials.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Use personal protective equipment as required. Remove all sources of ignition. Remove all heat sources.

### Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so. Soak up and contain spill with an absorbent material.

**Methods for Clean-Up** Reclaim where possible. Sweep up and shovel into suitable containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Wear appropriate personal protective equipment. Wash face, hands and any exposed skin thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Materials** Strong oxidizing agents. Strong acids. Strong bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Manganese(II) sulfate 7785-87-7	TWA: 0.02 mg/m <sup>3</sup> Mn respirable particulate matter TWA: 0.1 mg/m <sup>3</sup> Mn inhalable particulate matter	(vacated) Ceiling: 5 mg/m <sup>3</sup> Ceiling: 5 mg/m <sup>3</sup> Mn	IDLH: 500 mg/m <sup>3</sup> Mn TWA: 1 mg/m <sup>3</sup> Mn STEL: 3 mg/m <sup>3</sup> Mn

### Appropriate engineering controls

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits. Maintain eye wash fountain and quick-drench facilities in work area.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Wear eye/face protection. Refer to 29 CFR 1910.133 for eye and face protection regulations.

**Skin and Body Protection** Wear protective gloves and protective clothing. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

**Respiratory Protection** If necessary, wear a MSHA/NIOSH-approved respirator. Refer to 29 CFR 1910.134 for respiratory protection requirements.

**General Hygiene Considerations** Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid	<b>Odor</b>	Not determined
<b>Appearance</b>	Not determined	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Not determined		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting point / freezing point	Not determined	
Boiling point / boiling range	Not determined	
Flash point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Flammability Limit in Air		
Upper flammability or explosive limits	Not determined	
Lower flammability or explosive limits	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Relative Density	Not determined	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	Not determined	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to Avoid

Keep out of reach of children.

### Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

### Hazardous decomposition products

Nitrogen oxides (NO<sub>x</sub>). Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Eye Contact</b>	Causes serious eye irritation.
<b>Skin Contact</b>	Prolonged contact may cause redness and irritation.
<b>Inhalation</b>	Do not inhale.
<b>Ingestion</b>	May be harmful if swallowed. May cause nausea, vomiting, stomach ache, and diarrhea.

### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Nitrate 7631-99-4	= 1267 mg/kg ( Rat )	-	-
Potassium Sulfate 7778-80-5	= 6600 mg/kg ( Rat )	-	-
Zinc sulfate heptahydrate 7446-20-0	= 1260 mg/kg ( Rat )	-	-
Manganese(II) sulfate 7785-87-7	= 782 mg/kg ( Rat )	-	-

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Symptoms</b>	Please see section 4 of this SDS for symptoms.
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### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Carcinogenicity</b>	Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
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Chemical name	ACGIH	IARC	NTP	OSHA
Sodium Nitrate 7631-99-4		Group 2A		X

### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

<b>Oral LD50</b>	2,907.10 mg/kg
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## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic life with long lasting effects.

### Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Magnesium Sulfate Anhydrous 7487-88-9	2700: 72 h Desmodesmus subspicatus mg/L EC50	2610 - 3080: 96 h Pimephales promelas mg/L LC50 static 19000: 24 h Lepomis macrochirus mg/L LC50 static	1700: 24 h Daphnia magna mg/L EC50 266.4 - 417.3: 48 h Daphnia magna mg/L EC50 Static

### Persistence/Degradability

Not determined.

**Bioaccumulation**

There is no data for this product.

**Mobility**

Chemical name	Partition coefficient
Sodium Nitrate 7631-99-4	-3.8

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods**

<b>Disposal of Wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Status**

Chemical name	California Hazardous Waste Status
Sodium Nitrate 7631-99-4	Toxic Ignitable Reactive
Zinc sulfate heptahydrate 7446-20-0	Toxic

**14. TRANSPORT INFORMATION**

<b>Note</b>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
<b>DOT</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG</b>	Not regulated

**15. REGULATORY INFORMATION****International Inventories**

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Sodium Nitrate	X	ACTIVE	X	X	X	X	X	X	X
Potassium Sulfate	X	ACTIVE	X	X	X	X	X	X	X
Zinc sulfate heptahydrate			X		X	X		X	X
Manganese(II) sulfate	X	ACTIVE	X	X	X	X	X	X	X

**Legend:***TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS - Japan Existing and New Chemical Substances**IECSC - China Inventory of Existing Chemical Substances**KECL - Korean Existing and Evaluated Chemical Substances**PICCS - Philippines Inventory of Chemicals and Chemical Substances*

AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Sodium Nitrate - 7631-99-4	7631-99-4	30-40	1.0
Zinc sulfate heptahydrate - 7446-20-0	7446-20-0	<1.0	1.0
Manganese(II) sulfate - 7785-87-7	7785-87-7	<1.0	1.0

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc sulfate heptahydrate		X		

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product contains the following substance(s) regulated under applicable state right-to-know regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium Nitrate 7631-99-4	X	X	X
Zinc sulfate heptahydrate 7446-20-0	X		X
Manganese(II) sulfate 7785-87-7	X		X

**16. OTHER INFORMATION****NFPA****Health Hazards****Flammability****Instability****Special Hazards**

Not determined

Not determined

Not determined

Not determined

**HMIS****Health Hazards****Flammability****Physical hazards****Personal Protection**

Not determined

Not determined

Not determined

Not determined

Issue Date:

06-May-2020

Revision Date:

07-May-2020

Revision Note:

New product

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**