

Safety Data Sheet

Issue Date: 26-Dec-2014

Revision Date: 04-Apr-2017

Version 1

1. IDENTIFICATION

Product Identifier

Product Name AVAIL for Granular Phosphate Fertilizers

Other means of identification

SDS # VLS-063-CA

Product Code FFN: 04002
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Fertilizer

Uses Advised Against No information available

Details of the supplier of the safety data sheet

Initial Supplier Identifier

Verdesian Life Sciences, U.S., LLC.
1001 Winstead Drive, Suite 480
Cary, NC 27513

Emergency Telephone Number

Initial supplier phone number Business Phone: (800) 868-6446 Fax: (919) 535-3652
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Tan to brown liquid **Physical state** Liquid **Odor** Characteristic

Classification

This chemical does not meet the hazardous criteria set forth by the 2015 WHMIS standards. However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

Other Information

Unknown acute toxicity 12 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical Family Carboxylated polymer.

4. FIRST AID MEASURES

First Aid Measures

General advice	Provide this SDS to medical personnel for treatment.
Eye contact	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
Skin contact	Wash off immediately with plenty of water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.
Inhalation	Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician/poison center if individual's condition declines or if symptoms persist.
Ingestion	Do NOT induce vomiting. Rinse mouth. Call a physician immediately.

Most important symptoms and effects

Symptoms	May cause eye, skin and respiratory tract irritation. Will cause gastrointestinal tract irritation.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Water spray. Dry chemical. Carbon dioxide (CO2). Foam.
Unsuitable extinguishing media	CAUTION: Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	Toxic fumes may be given off when material is exposed to fire.
Explosion Data	
Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.
Special protective equipment for fire-fighters	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.
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Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.
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Methods and material for containment and cleaning up

- Methods for containment** Prevent further leakage or spillage if safe to do so.
- Methods for cleaning up** Keep in suitable, closed containers for disposal.
- Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

- Advice on safe handling** Wash thoroughly after handling. Use personal protection recommended in Section 8. 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 reducing agents Materials incompatible with water Materials incompatible with sodium salts

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

- Exposure Limits** No exposure limits noted for ingredient(s). The following information is given as general guidance.

Appropriate engineering controls

- Engineering controls** Maintain eye wash fountain and quick-drench facilities in work area.

Individual protection measures, such as personal protective equipment

- Eye/face protection** Use chemical safety goggles / face shield.
- Hand protection** Chemical resistant protective gloves.
- Skin and body protection** No special protective equipment required.
- Respiratory protection** Ensure adequate ventilation, especially in confined areas.
- 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

Physical state	Liquid
Appearance	Tan to brown liquid
Color	Tan to brown
Odor	Characteristic
Odor Threshold	No information available

Property	Values	Remarks • Method
pH	7.0-8.0	
Melting Point/Freezing Point	-10 °C / 14 °F	
Boiling Point/Boiling Range	Not determined	
Flash Point	None	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	n/a-liquid	
Flammability Limits in Air		
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Relative Density	1.2-1.4	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	<50 cP	
Explosive properties	No information available.	
Oxidizing properties	No information available.	

Other Information

Softening Point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk Density	No information available

10. STABILITY AND REACTIVITY

Reactivity	Not reactive under normal conditions.
Chemical Stability	Stable under normal conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to Avoid	Incompatible Materials.
Incompatible Materials	Strong oxidizing agents. Strong reducing agents. Materials incompatible with water. Materials incompatible with sodium salts.
Hazardous Decomposition Products	Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	To the best of our knowledge, the chemical, physical and toxicological properties of this material have not been thoroughly investigated
Eye contact	Irritating to eyes.
Skin contact	Irritating to skin.
Inhalation	May cause irritation to the mucous membranes and upper respiratory tract.
Ingestion	Can cause gastrointestinal disturbance.

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Numerical measures of toxicity

Acute Toxicity

Unknown acute toxicity 12 % of the mixture consists of ingredient(s) of unknown toxicity

Component Information Not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

12. ECOLOGICAL INFORMATION

Ecotoxicity	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Persistence/Degradability	No information available.
Bioaccumulation	No information available.
Other Adverse Effects	No information available.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Waste from residues/unused products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances
DOT	Not regulated
TDG	Not regulated
IATA	Not regulated
IMDG	Not regulated

15. REGULATORY INFORMATION

REGULATORY INFORMATION

International Regulations

Ozone-depleting substances (ODS)	Not applicable
Persistent Organic Pollutants	Not applicable
Export Notification requirements	Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	Health Hazards 1	Flammability 0	Instability 0	Special Hazards Not determined
HMIS	Health Hazards 1	Flammability 0	Physical hazards 0	Personal Protection C

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)
STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value
*	Skin designation
Issue Date:	26-Dec-2014

Revision Date: 04-Apr-2017

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