Safety Data Sheet

Issue Date: 17-Nov-2000 Revision Date: 20-Jun-2014 Version 1

1. IDENTIFICATION

Product Identifier

Product Name PolyAmine Iron Organic

Other means of identification

SDS # VLS-038

Other Information Factory Formula: 1210.

Recommended use of the chemical and restrictions on use

Recommended Use Fertilizer.

Details of the supplier of the safety data sheet

Supplier Address

Verdesian Life Sciences, U.S., LLC.

12222 Ave 352 Visalia, CA 93291

Emergency Telephone Number

Company Phone Number Business Phone: (800) 868-6446

Fax Phone: (559) 625-9255

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Dark liquid Physical State Liquid Odor Citrus

Classification

Hazards Not Otherwise Classified (HNOC)

Causes mild skin irritation

Unknown Acute Toxicity

1% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Ferrous Sulfate	7782-63-0	5.52
Organic Acid	Proprietary	1-10

^{**}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

First Aid Measures

Eye Contact 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 with soap and water. Take off contaminated clothing. Wash contaminated clothing

before reuse. If skin irritation persists, call a physician.

Inhalation Remove to fresh air. Get medical attention if discomfort persists.

Ingestion Call a physician or poison control center immediately.

Most important symptoms and effects

Symptoms Inhalation may cause irritation to nasal passages. May cause skin and eye irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical. Carbon dioxide (CO2). Foam. Water spray (fog).

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Combustion products may be toxic.

Hazardous Combustion Products Nitrogen oxides (NOx).

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. Use water spray to keep fire-exposed containers cool. Do not release runoff from fire control methods to sewers or waterways.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Absorb liquids by covering with clay or tuber absorbent material. Vacuum or sweep up

material and place in a disposal container.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Observe

precautions found on the label.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children. Do not contaminate food or feed stuffs. Protect from freezing.

Incompatible Materials Strong oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ferrous Sulfate 7782-63-0	TWA: 1 mg/m ³ Fe	(vacated) TWA: 1 mg/m³ Fe	TWA: 1 mg/m³ Fe
Organic Acid	-	15 mg / m3 (Total)	-

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Avoid contact with eyes.

Skin and Body Protection Protective gloves are not required, but recommended. Wear suitable protective clothing.

Respiratory Protection None normally required. If vapors may exceed acceptable levels, use an OSHA/NIOSH-

approved respirator or mask for protection against pesticide dusts, mists, and vapors.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid

Appearance Dark liquid Odor Citrus

Color Dark Colored **Odor Threshold** Not determined

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 2.4

Melting Point/Freezing Point

Boiling Point/Boiling Range

100 °C / 212 °F

Flash Point

Does not flash

Evaporation Rate Slower than butyl acetate

Flammability (Solid, Gas) n/a-liquid **Upper Flammability Limits** Not applicable **Lower Flammability Limit** Not applicable **Vapor Pressure** Not available **Vapor Density** Not available Specific Gravity Not determined Water Solubility Miscible in water Solubility in other solvents Not determined Not determined **Partition Coefficient Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** Not determined Density 10.079 wt/gal

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.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Excessive heat.

Incompatible Materials

Strong oxidizers.

Hazardous Decomposition Products

Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact Causes mild skin irritation.

Inhalation Avoid breathing vapors or mists.

Ingestion Do not taste or swallow.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Organic Acid	= 3000 mg/kg (Rat)	-	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

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

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA,

IARC or NTP.

Numerical measures of toxicity

Not determined

Unknown Acute Toxicity 1% of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Organic Acid		1516: 96 h Lepomis macrochirus mg/L LC50		120: 72 h Daphnia magna mg/L EC50
		static		mg/2 2000

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient	
Organic Acid	-1.72	

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes 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

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Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Not determined

US Federal Regulations

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ferrous Sulfate	1000 lb		RQ 1000 lb final RQ
7782-63-0			RQ 454 kg final RQ

SARA 311/312 Hazard Categories

Acute Health HazardYesChronic Health HazardNoFire HazardNoSudden Release of Pressure HazardNoReactive HazardNo

SARA 313

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ferrous Sulfate 7782-63-0 (5.52)				Х

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ferrous Sulfate		X	X
7782-63-0			

16. OTHER INFORMATION

NFPA Health Hazards

Not determined

Health Hazards

Not determined

Flammability
Not determined
Flammability
Not determined

Instability
Not determined
Physical Hazards
Not determined

Special Hazards
Not determined
Personal Protection
Not determined

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Disclaimer

HMIS

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End of Safety Data Sheet
