Safety Data Sheet

Issue Date: 04-May-2015 Revision Date: 03-June-2019 Version 3

1. IDENTIFICATION

Product Identifier

Product Name Intracept

Other means of identification

SDS # FFN: 00442 VLS-098

Recommended use of the chemical and restrictions on use

Recommended Use Plant Nutrients.

Details of the supplier of the safety data sheet

Supplier Address

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

Emergency Telephone Number

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

Fax Phone: (919) 535-3652

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

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Dark brown liquid Physical State Liquid Odor Sweet

Classification

Serious eye damage/eye irritation Category 2

Signal Word

Warning

Hazard Statements

Causes serious eye irritation



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear eye/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 with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Citric Acid	77-92-9	1-10
Magnesium sulfate	10034-99-8	1-5
Copper sulfate	7758-99-8	1-5
Ferrous sulfate	7720-78-7	1-5
Manganese sulfate	7758-87-7	1-5
Zinc sulfate	7446-19-7	1-5

^{**}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

General Advice Provide this SDS to medical personnel for treatment.

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. Seek immediate medical attention/advice.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. 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. Induce vomiting only if advised by medical personnel. Drink 1 or 2

glasses of water. Never give anything by mouth to an unconscious person. Call a physician

or poison control center immediately.

Most important symptoms and effects

Symptoms May cause discomfort if swallowed. May cause skin and eye irritation. Will cause

gastrointestinal tract 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.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

None.

Hazardous Combustion Products May release toxic oxides of Zinc and Sulfur in a fire.

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 PrecautionsUse personal protective equipment as required.

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-UpSweep up and shovel into suitable containers for disposal. Discard any product, residue,

disposable container or liner in full compliance with federal, state, and local regulations. For

waste disposal, see section 13 of the SDS.

Prevention of Secondary

Hazards

Spills may present a slipping hazard.

7. HANDLING AND STORAGE

Precautions for safe handling

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

skin, eyes or clothing. Use personal protection recommended in Section 8. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when

using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Protect from

direct sunlight. Keep out of the reach of children.

Incompatible Materials Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Citric Acid	-	15 mg / m3 (Total)	-
77-92-9		, ,	

Appropriate engineering controls

Engineering ControlsApply technical measures to comply with the occupational exposure limits. Eyewash

stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety goggles.

Skin and Body Protection Wear suitable protective clothing.

Respiratory Protection In case of inadequate ventilation wear respiratory protection. Wear an appropriate

NIOSH/MSHA approved respirator if ventilation is inadequate.

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 brown liquid Odor Sweet

Color Dark brown Odor Threshold Not determined

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

Not applicable Melting Point/Freezing Point Not applicable 100 °C / 212 °F **Boiling Point/Boiling Range** Flash Point Not applicable **Evaporation Rate** Not applicable Flammability (Solid, Gas) Not determined **Upper Flammability Limits** Not determined **Lower Flammability Limit** Not determined **Vapor Pressure** Not determined Not determined **Vapor Density**

Specific Gravity 1.17

Soluble in water Water Solubility Not determined Solubility in other solvents **Partition Coefficient** Not determined **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

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.

Hazardous Decomposition Products

May release toxic oxides of Zinc and Sulfur in a fire.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes serious eye irritation.

Skin Contact Avoid contact with skin.

Inhalation Avoid breathing vapors or mists.

Ingestion May cause discomfort if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Citric Acid	= 3000 mg/kg (Rat)	-	-
77-92-9			

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 Based on the information provided, this product does not contain any carcinogens or

potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Citric Acid		1516: 96 h Lepomis		120: 72 h Daphnia magna
77-92-9		macrochirus mg/L LC50		mg/L EC50
		static		

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Citric Acid	-1.72
77-92-9	

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.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Zinc sulfate	Toxic
7446-19-7	

14. TRANSPORT INFORMATION

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

Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Citric Acid	Present	Х		Present		Present	Х	Present	Х	Х
Zinc sulfate		X					Х		Х	Х

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

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 %
Zinc sulfate - 7446-19-7	7446-19-7	1-5	1.0

CWA (Clean Water Act)

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

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Zinc sulfate	X		X
7446-19-7			

16. OTHER INFORMATION

NFPA **Health Hazards Flammability** Instability **Special Hazards** Not determined Not determined Not determined Not determined **Health Hazards Flammability Physical Hazards Personal Protection HMIS** Not determined Not determined Not determined Not determined

Issue Date:04-May-2015Revision Date:03-June-2016Revision Note:Section 9 correction

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