Safety Data Sheet

Issue Date: 20-Jun-2015 Revision Date: 22-Jan-2019 Version 2

1. IDENTIFICATION

<u>Product Identifier</u> Accolade-L

Product Name

Other means of identification

SDS # VLS-122

Document AKA for this product: PRIMO, PRIMO POWER, and N-Take

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 Yellow to brown liquid Physical State Liquid Odor Mild

Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). 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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Liquid inoculant products containing live culture of nitrogen fixing rhizobium bacteria. Product may also contain a separate aqueous additive of Azospirillum as a free-living, nitrogen-giving bacteria.

Contains naturally occurring Rhizobacterium and growth enhancement compounds.

These are symbiotic nitrogen-fixing bacteria, to be applied as a seed treatment or in-furrow at seed planting, to specific legume crops (not a plant food product). See product label for specific crop information, application rates and methods. Not for food, feed or drug use.

4. FIRST-AID MEASURES

First Aid Measures

General Advice Provide this SDS to medical personnel for treatment.

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 off immediately with plenty of water. Take off contaminated clothing. Wash

contaminated clothing before reuse.

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. Get medical attention if you feel unwell.

Most important symptoms and effects

Symptoms 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.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Product is not flammable.

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.

Methods for Clean-Up Keep in suitable, closed containers for disposal.

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 Some seed-applied chemicals, including fungicides, may be harmful to the bacteria in this

product. See product label for further information on the use of fungicides or other

chemicals in conjunction with seed treatment.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure GuidelinesNo 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 Wear eye/face protection.

Skin and Body Protection Wear suitable protective clothing.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

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 Yellow to brown liquid Odor Mild

Color Yellow to brown Odor Threshold Not determined

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

На 6.5-7.4 Melting Point/Freezing Point -4 °C / 25 °F **Boiling Point/Boiling Range** 102 °C / 216 °F Flash Point Not determined **Evaporation Rate** Not determined Flammability (Solid, Gas) Not determined **Upper Flammability Limits** Not determined **Lower Flammability Limit** Not determined **Vapor Pressure** Not determined **Vapor Density** Not determined **Specific Gravity** 1.0 g/cc

Water Solubility
Solubility in other solvents
Partition Coefficient
Auto-ignition Temperature
Insoluble in water
Not determined
Not determined
Not determined

Decomposition Temperature
Kinematic Viscosity

Dynamic Viscosity

Explosive Properties

Oxidizing Properties

Not determined
Not determined
Not determined
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.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Incompatible Materials.

Incompatible Materials

Some seed-applied chemicals, including fungicides, may be harmful to the bacteria in this product. See product label for further information on the use of fungicides or other chemicals in conjunction with seed treatment.

Hazardous Decomposition Products

Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Direct contact with eyes may cause temporary irritation.

Skin Contact May cause temporary irritation on skin contact.

Inhalation Not an expected route of exposure.

Ingestion May cause discomfort if swallowed.

Component Information Mixture

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

Sensitization Not a skin sensitizer.

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

Product Information

 Oral LD50
 > 5000 mg/kg

 Dermal LD50
 > 2000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

This product contains nonpathogenic, biodegradable Rhizobacterial strain(s) that occur(s) naturally in soil.

Component Information Mixture

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined

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

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

exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

<u>IMDG</u> Not regulated

15. REGULATORY INFORMATION

International Inventories

NONE

US Federal Regulations

SARA 313

Not determined

US State Regulations

U.S. State Right-to-Know Regulations

Not determined

16. OTHER INFORMATION

NFPAHealth Hazards
Not determinedFlammability
Not determinedInstability
Not determinedSpecial Hazards
Not determinedHMISHealth Hazards
0Flammability
0Physical Hazards
0Personal Protection
Not determined

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 Section 3

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