



SAFETY DATA SHEET

According to Federal Regulation 29 CFR 1910.1200

SECTION I: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: DIEHARD™ Root Dip

Type of product: Granular

1.2 Relevant identified uses of the substance or mixture and uses advised again

Identified uses: Processing aid for industrial applications.

Uses advised against: None

1.3 Details of the supplier of the safety data sheet

Company: Horticultural Alliance Inc.

Address: 1550 66th Ave Dr E
Sarasota, FL 34243
United States

Telephone: 800-628-6373

Telefax: 888-386-4478

E-mail: info@horticulturalalliance.com

1.4 Emergency telephone number

24-hour emergency number: 800-424-9300 CHEMTREC (CNN 20412), Outside U.S. 703-527-3887

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to paragraph (d) of regulation 29 CFR 1910.1200:

Not classified

2.2 Label elements

Labelling according to paragraph (f) of Regulation 29 CFR 1910.1200:

Hazard symbol (s): None.

Signal word: None.

Hazard statement(s): None.

Precautionary statement(s): None.

2.3 Other hazards

The product, when wet, renders surfaces extremely slippery. The product swells in water.

SECTION 3. Composition/information on ingredients

3.1 Substances

Not applicable, this product is not a substance.

3.2 Mixtures

Hazardous components

Potentially Hazardous Components	%	OSHA PEL	NIOSH	ACGIH
Humate (Coal, Humic Acids)	35%	1.5 mg/ m ³	-	0.1 mg/ m ³
Crystalline Quartz	0.7% - 2.5%	0.1 mg/ m ³ (reparable)	50ug/ m ³ (reparable)	-
Natural spores of Pisolithus tinctorius, a collected forest fungus.	<1%	15mg/ m ³ nuisance dust	-	10 mg/ m ³ nuisance dust

SECTION 4. First aid measures

4.1 Description of first aid measures

Inhalation:

No hazards which require special first aid measures. If irritation persists, obtain medical attention.

Skin contact:

Presents no hazards.

Eye contact:

Rinse thoroughly with plenty of water, also under eyelids. If eye irritation occurs, consult a physician.

Ingestion:

The product is not considered toxic based on studies on laboratory animals.

4.2 Most important symptoms and effects, both acute and delayed

None

4.3 Indication of any immediate medical attention and special treatment needed.

None

Other information:

None

SECTION 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Water, water spray, foam, carbon dioxide, dry power.

Unsuitable extinguishing media:

None.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products:

Airborne concentrations of spore dust at high temperature

5.3 Advice for fire-fighters

Protective measures:

In the event of fire, wear self-contained breathing apparatus. Use standar firefighting procedures and preferred extinguishing media above.

Other information:

Take precautions against explosion hazard associated with airborne concentrations of spore dust at high temperature.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions:

None.

Protective equipment:

Wear adequate personal protective equipment (see Section 8 Exposure Controls/ Personal Protection).

Emergency procedures

Keep people away from spill/leak.

6.2 Environmental precautions

As with all chemical products, do not flush into surface water.

6.3 Methods and material for containment and cleaning up

Clean up promptly by scoop or vacuum. Avoid stirring up dust. Seep up under a water mist to reduce dust potential. If contact with skin occurs wash skin with soap and water. Keep in suitable and closed containers for disposal.

6.4 Reference to other sections

Section 7: Handling and storage; SECTION 8: Exposure controls/personal protection; SECTION 9: Physical and chemical properties; SECTION 13: Disposal considerations.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Wash hands before breaks and at the end of the workday.

7.2 Conditions for safe storage, including any incompatibilities.

Keep in dry place, cool place (0-35C) Keep container closed when not in use.

7.3 Specific end use (s)

No information available.

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits:

None

8.2 Exposure Controls:

Appropriate engineering controls:

Use local exhaust if dusting occurs. Natural ventilation is adequate in absence of dusts.

Individual protection measures such as personal protective equipment

a) Eye/face protection:

Safety glasses with side-shields.

b) Skin protection:

Not mandatory use protective clothes

c) Respiratory protection:

Dust safety masks are recommended where concentration of the total dust is more than 10 mg/m^3

- d) **Additional advice:**
Handle in accordance with good industrial hygiene and safety practice.
- e) **Hand protection:**
Not mandatory use protective clothes

Environmental exposure controls:

Do not allow uncontrolled discharge of product into the environment.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|---------------------------------------------------------|----------------------------------------------------------------|
| a) Appearance : | <i>Brown dust and granular</i> |
| b) Odour: | <i>Slight – earth smell</i> |
| c) Odour Threshold: | <i>Not applicable.</i> |
| d) pH: | <i>Not applicable.</i> |
| e) Melting point/freezing point: | <i>Not Applicable.</i> |
| f) Initial Boiling point and boiling range: | <i>Not Applicable.</i> |
| g) Flash point: | <i>Not Applicable.</i> |
| h) Evaporation rate: | <i>Not Applicable.</i> |
| i) Flammability (solid, gas): | <i>Not data available.</i> |
| j) Upper/lower flammability or explosive Limits: | <i>Keep away from heat and flame.</i> |
| k) Vapour pressure: | <i>Not Applicable.</i> |
| l) Vapour density: | <i>Not Applicable.</i> |
| m) Relative density: | <i>0.4-0.6</i> |
| n) Solubility (ies): | <i>Both soluble and insoluble</i> |
| o) Partition coefficient: | <i>Not Applicable.</i> |
| p) Autoignition temperature: | <i>Does not self-ignite (based on the chemical structure).</i> |

- | | |
|-------------------------------|---------------------------------------------------------------|
| q) Decomposition temperature: | Not Applicable. |
| r) Viscosity: | Not Applicable. |
| s) Explosive properties: | Not expected to be explosive based on the chemical structure. |
| t) Oxidizing properties: | Not expected to be oxidizing based on the chemical structure. |

9.2 Other information

None.

SECTION 10. Stability and reactivity

10.1 Reactivity

None known.

10.2 Chemical stability

Product is stable.

10.3 Possibility of hazardous reactions

Presents no significant reactivity hazard.

10.4 Conditions to avoid

Avoid explosive dust concentrations.

10.5 Incompatible materials

Incompatible with strong acids and oxidizing agents.

10.6 Hazardous decomposition products

None known.

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Information on the product as supplied:

<i>Acute oral toxicity:</i>	<i>Persons with acute allergies could become asthmatic (rare) Allergies could develop over time in some individuals. Persons with mold allergies could experience hay fever with sneezing and nasal congestion.</i>
<i>Acute dermal toxicity:</i>	<i>Skin allergy could develop from special repeated excess skin contact, involving itching and rash (rare).</i>
<i>Acute inhalation toxicity:</i>	<i>Avoid inhalation</i>
<i>Skin corrosion/irritation:</i>	<i>Not irritating.</i>
<i>Serious eye damage/eye irritation:</i>	<i>Not irritating.</i>
<i>Respiratory/skin sensitization:</i>	<i>Not sensitizing.</i>
<i>Mutagenicity:</i>	<i>Not mutagenic.</i>
<i>Carcinogenicity:</i>	<i>Not carcinogenic.</i>
<i>Reproductive toxicity:</i>	<i>Not toxic for reproduction.</i>
<i>STOT – single exposure:</i>	<i>No known effects.</i>
<i>STOT – repeated exposure:</i>	<i>No known effects.</i>
<i>Aspiration hazard:</i>	<i>No hazards resulting from the material as supplied.</i>

SECTION 12. Ecological information

12.1 Toxicity

Information on the product as supplied:

<i>Acute toxicity to fish :</i>	<i>No Data available.</i>
<i>Acute toxicity to invertebrates :</i>	<i>No Data available.</i>
<i>Acute toxicity to algae :</i>	<i>No Data available.</i>
<i>Chronic toxicity to fish :</i>	<i>No Data available.</i>
<i>Chronic toxicity to invertebrates :</i>	<i>No Data available.</i>
<i>Toxicity to microorganisms :</i>	<i>No Data available.</i>

Revised date: 06/01/2015

<i>Effects on terrestrial organisms :</i>	<i>No known effects.</i>
<i>Sediment toxicity:</i>	<i>No Data available.</i>

12.2 Persistence and degradability

Information on the product as supplied:

<i>Degradation :</i>	<i>Biodegradable.</i>
<i>Hydrolysis:</i>	<i>Does not hydrolyse.</i>
<i>Photolysis:</i>	<i>No data available.</i>

12.3 Bioaccumulative potential

Information on the product as supplied:

<i>Not bioaccumulating.</i>	
<i>Partition co-efficient (Long Pow):</i>	<i>No data available.</i>
<i>Bioconcentration factor (BCF):</i>	<i>No data available.</i>

12.4 Mobility in soil

Information on the product as supplied:

None.

12.5 Other adverse effects.

None known.

SECTION 13. Disposal considerations

13.1 Waste treatment methods.

Waste from residues/ unused products:

Dispose in accordance with local and national regulations. Can be landfilled or incinerated, when in compliance with local regulations.

Contaminated packaging:

Dispose in accordance with local and national regulations. Can be landfilled or incinerated, when in compliance with local regulations.

Recycling:

The product and its packaging are not suitable for recycling.

SECTION 14. Transport information

Land transport (DOT)

Not classified.

Sea transport (IMDG)

Not classified.

Air transport (IATA)

Not classified.

SECTION 15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

Information on the product as supplied:

TSCA Chemical Substances Inventory:

All components of this product are either listed on the inventory or are exempt from listing.

US SARA Reporting Requirements:

SARA (Section 311/312) hazard class:
Not concerned.

RCRA status:
Not RCRA hazardous.

California Proposition 65 information

NFPA and HMIS Ratings:

NFPA:

Health : o

Flammability: o

Instability: o



HMIS:

Health : o

Revised date: 06/01/2015

Flammability: o

Physical Hazard: o

PPE Code: o

This data sheet contains changes from the previous version in section(s):

SECTION 2. Hazards identification, SECTION 3. Composition/information on ingredients, SECTION 4. First aid measures, SECTION 11. Toxicological information, SECTION 16. Other Information.

Key or legend to abbreviations and acronyms used in the safety data sheet.

None.

This SDS was prepared in accordance with the following :

Federal Regulation 29 CFR 1910.1200

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 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.