

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

- 1.1 **PRODUCT IDENTIFIER:** EPA REGISTRATION NO. 34704-1109
TRADE NAME: DYNA-SHIELD DEFUZE™ SEED TREATMENT FUNGICIDE
- 1.2 **RECOMMENDED USE:** GROUP 3 FUNGICIDE FOR SEED TREATMENT
- 1.3 **SUPPLIER DETAILS:**
 LOVELAND PRODUCTS, INC.
 P.O. Box 1286 • Greeley, CO 80632-1286
- 1.4 **24 Hour Emergency Phone:** 1-800-424-9300 - **Medical Emergencies:** 1-866-944-8565 – **Product Information:** 1-888-574-2878 (LPI-CUST)
U.S. Coast Guard National Response Center: 1-800-424-8802

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Environmental Hazards

Very toxic to aquatic life.	Category 1	H400
Very toxic to aquatic life with long lasting effects.	Category 1	H410

2.2 Label elements



Signal word: WARNING
 Hazard Statement: H410 –Very toxic to aquatic life with long lasting effects.

Precautionary Statement: P273 – Avoid release to the environment.
 (Prevention): P391 – Collect spillage.

Precautionary Statement: Not applicable or required.
 (Response):

Precautionary Statement: Not applicable or required.
 (Storage):

Precautionary Statement: P501 – Dispose of contents/container in accordance with local, state and federal regulations.
 (Disposal):



SAFETY DATA SHEET

SDS NUMBER: 001109-17-LPI

SDS REVISIONS: NEW

DATE OF ISSUE: 08/17/17

DYNA-SHIELD DEFUZE™

SUPERSEDES: NEW

2.3 Other hazards
None known

3. COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

3.2 Mixtures

Classification according to 29 CFR 1910.1200

Chemical Name:	CAS No.	Concentration [%]
Difenoconazole	119446-68-3	32.30 – 34.30
Propylene glycol	57-55-6	1.90 – 2.10
*Other ingredients		63.60 - 65.80

*Ingredients not specifically listed are non-hazardous and are to be considered proprietary or confidential business information per 29 CFR 1910.1200(i)

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.

- If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
- If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
- If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms: Oral: Harmful if swallowed.
Skin: Harmful if absorbed through skin.
Inhalation: Harmful if inhaled.

4.3 Immediate Medical Attention and Special Treatment

Treatment: Treat symptomatically. Symptoms may be delayed.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565

Have product container or label with you when calling a poison control center, or going for treatment.

NOTES TO PHYSICIAN: Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.



SAFETY DATA SHEET

SDS NUMBER: 001109-17-LPI

SDS REVISIONS: NEW

DATE OF ISSUE: 08/17/17

DYNA-SHIELD DEFUZE™

SUPERSEDES: NEW

5. FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Suitable Extinguishing Media: Use medium appropriate to surrounding fire. Dry chemical, carbon dioxide (CO₂), alcohol foam, foam, water spray or fog.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Specific Hazards During Firefighting: Oxides of nitrogen and oxides of carbon may be formed in a fire situation.

5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Special Protective Equipment for Firefighters: Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving chemicals. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions: Avoid inhalation of vapors and spray mist and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing.

6.2 ENVIRONMENTAL PRECAUTIONS

Environmental Precautions: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by disposing of equipment washwater.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

Methods for Clean-Up: Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. After removal flush contaminated area thoroughly with water. Don not allow to enter sewer systems or waterways. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers: Store in original container only in a dry, temperature controlled, secure place. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

OCCUPATIONAL EXPOSURE LIMITS

U.S. Workplace Exposure Level (ACGIH) TLVs

Components	Type	Value
No listings	TLV	
	TLV	

U.S. Workplace Exposure Level (OSHA) PELs

Components	Type	Value
No listings	TLV	
	TLV	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Specimen
No listings		



SAFETY DATA SHEET

SDS NUMBER: 001109-17-LPI

SDS REVISIONS: NEW

DATE OF ISSUE: 08/17/17

DYNA-SHIELD DEFUZE™

SUPERSEDES: NEW

8.2 EXPOSURE CONTROLS:

Engineering Measures

Note: Persons involved in bagging treated seed, sewing or moving bags of treated seed, or cleaning up bagging areas or seed treatment equipment are pesticide handlers and must wear the PPE require below.

Individual Protection Measures:

Eye / Face Protection: Goggles or shielded safety glasses are recommended.

Skin Protection: Long-sleeved shirt and long pants. Chemical-resistant gloves (Barrier Laminate, Butyl Rubber \geq 14 mils, Nitroile rubber \geq 14 mils, Neoprene Rubber \geq 14 mils, Polyvinyl Chloride \geq 14 mils, Viton \geq 14 mils. Shoes plus socks.

Respiratory Protection: Not normally required, if vapors or dusts exceed acceptable levels, wear a MSHA/NIOSH approved dust mist filtering respirator with any N, R, P, or HE filter. If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection standard. Wear air supplied respiratory protection if exposure concentrations are unknown.

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 APPEARANCE: Liquid
ODOR: Mild.
ODOR THRESHOLD: No data available.
COLOR: Light brown.
pH: 6.39 (1% solution @ 25 °C)
MELTING POINT / FREEZING POINT: No data available
BOILING POINT: No data available
FLASH POINT: No data available.
FLAMMABILITY (solid, gas): No data available.
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: No data available.
VAPOR PRESSURE: No data available.
SOLUBILITY: Dispersible.
PARTITION CO-EFFICIENT, n-OCTANOL / WATER: No data available.
AUTO-IGNITION TEMPERATURE: No data available.
DECOMPOSITION TEMPERATURE: No data available.
VISCOSITY: 368.4 cPs @ 24 °C | 326.4 cPs @ 39 °C
SPECIFIC GRAVITY (Water = 1): 1.117 g/ml
DENSITY: 9.32 lbs/gal | 1.12 kg/L

Note: These physical data are typical values based on material tested but may vary from sample to sample.
Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

Stable

10.2 CHEMICAL STABILITY

Stable under normal temperature conditions

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No data available. Will not polymerize.

10.4 CONDITIONS TO AVOID

Excessive heat. Do not store near heat or open flame.

10.5 INCOMPATIBLE MATERIALS

Strong oxidizing agents: bases and acids.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Oxides of carbon, nitrogen and sulfur or other asphyxiants may be formed from incomplete combustion.



SAFETY DATA SHEET

SDS NUMBER: 001109-17-LPI

SDS REVISIONS: NEW

DYNA-SHIELD DEFUZE™

SUPERSEDES: NEW

DATE OF ISSUE: 08/17/17

11 TOXICOLOGICAL INFORMATION

11.3 LIKELY ROUTES OF EXPOSURE

Eye contact. Ingestion. Skin Contact. Inhalation

LC₅₀ (rat): > 1.03 mg/L (4 HR)

LD₅₀ Oral (female rat): 2,962 mg/kg

LD₅₀ Dermal (rat): > 2,000 mg/kg

Acute Toxicity Estimates: No data available

Skin Irritation (rabbit): Non-irritating.

Eye Irritation (rabbit): Minimally irritating.

Specific Target Organ Toxicity: No data available.

Aspiration: No data available

Skin Sensitization (guinea pig): Not a sensitizer

Carcinogenicity: No data available.

Germ Cell Mutagenicity: No data available

Interactive Effects: None known

12 ECOLOGICAL INFORMATION

12.3 ECOTOXICITY

The product is very toxic to the aquatic environment with long-lasting effects.

Ecotoxicological Data

	Species	Test Results
No data available.		

Drift or runoff may adversely affect non-target plants.

Do not apply directly to water.

Do not contaminate water when disposing of equipment wash water.

Do not apply when weather conditions favor drift from target area.

12.2 PERSISTENCE AND DEGRADABILITY

Biodegradability: No data available

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: No data available

12.4 MOBILITY IN SOIL

No data available

12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

13 DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be used according to instructions on product label, contact your State Pesticide or Environmental Control Agency for guidance. Do not contaminate water, food or feed by storage or disposal.

14 TRANSPORT INFORMATION

14.3 LAND TRANSPORT

DOT Shipping Description: NOT REGULATED BY DOT.

U.S. Surface Freight Classification: INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS, NOI, OTHER THAN POISON (NMF 102120; CLASS: 60)



SAFETY DATA SHEET

SDS NUMBER: 001109-17-LPI

SDS REVISIONS: NEW

DATE OF ISSUE: 08/17/17

DYNA-SHIELD DEFUZE™

SUPERSEDES: NEW

15 REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA & HMIS Hazard Ratings:		NFPA		HMIS
1	Health	0	Least	1 Health
0	Flammability	1	Slight	0 Flammability
0	Instability	2	Moderate	0 Reactivity
		3	High	B PPE
		4	Severe	

SARA Hazard Notification/Reporting				
SARA Title III Hazard Category:	Immediate	<u>Y</u>	Fire	<u>N</u>
	Delayed	<u>Y</u>	Reactive	<u>N</u>
			Sudden Release of Pressure	<u>N</u>

Reportable Quantity (RQ) under U.S. CERCLA: No listings.
SARA, Title III, Section 313: No listings.
RCRA Waste Code: No listings.
CA Proposition 65: Not listed.

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION

Harmful if swallowed, absorbed through skin, or inhaled.
 Avoid contact with skin, eyes or clothing.
 Avoid breathing vapor or spray mist.
 Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
 Remove and wash contaminated clothing before reuse.

16 OTHER INFORMATION

SDS STATUS: New.

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

™Dyna-Shield Teemer is a trademark of Loveland Products, Inc.

Disclaimer and Limitation of Liability: This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, INC. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.