SAFETY DATA SHEET

FractureTM Fungicide

SDS #: 7454-A

Revision date: 2018-04-04

Format: NA Version 1.05



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name FractureTM Fungicide

Other means of identification

Product Code(s) 7454-A

Active Ingredient(s) Protein extracted from plants of the genus Lupinus

32139 PCP#

Recommended use of the chemical and restrictions on use

Recommended Use: Fungicide

Restrictions on Use: Use as recommended by the label.

Supplier Address

FMC Corporation 2929 Walnut Street Philadelphia, PA 19104

(215) 299-6000 (General Information)

msdsinfo@fmc.com (E-Mail General Information)

Emergency telephone number

For leak, fire, spill or accident emergencies, call: 1 800 / 424 9300 (CHEMTREC - U.S.A.) 1 703 / 741-5970 (CHEMTREC - International) 1 703 / 527 3887 (CHEMTREC - Alternate)

Medical Emergencies:

1 800 / 331-3148 (ProPharma Group - U.S.A. & Canada)

1 651 / 632-6793 (ProPharma Group - All Other Countries - Collect)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This material is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

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The product contains no substances which at their given concentration, are considered to be hazardous to health

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight %
Banda de Lupinus albus doce (BLAD)	1219521-95-5	20

BLAD is a naturally-occurring seed storage protein in sweet lupines; it is a 20 kDa polypeptide of ß-conglutin, or characterized as a fragment of the amino acid sequence of ß-conglutin.

4. FIRST AID MEASURES

Eye Contact Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove

contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison

control center or doctor for further treatment advice.

Skin ContactTake off contaminated clothing. Rinse skin immediately with plenty of water for 15-20

minutes. Call a poison control center or doctor for further treatment advice.

Inhalation Move to fresh air. If person is not breathing, contact emergency medical services, then give

artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or

doctor for further treatment advice.

Ingestion 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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

None known.

Indication of immediate medical attention and special treatment

needed, if necessary

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

surrounding environment.

Specific Hazards Arising from the

Chemical Explosion data

None known

Sensitivity to Mechanical Impact Sensitivity to Static Discharge

Not sensitive. Not sensitive.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear. Isolate fire area. Evaluate upwind.

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6. ACCIDENTAL RELEASE MEASURES

Isolate and post spill area. Wear suitable protective clothing, gloves and eye/face **Personal Precautions**

protection. For personal protection see section 8.

Other For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1

"Product and Company Identification" above.

Environmental Precautions Keep people and animals away from and upwind of spill/leak. Keep material out of lakes,

streams, ponds, and sewer drains.

Methods for Containment Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and

transfer to containers for later disposal.

Methods for cleaning up Clean and neutralize spill area, tools and equipment by washing with water and soap.

Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior

to recycling or disposal. Dispose of waste as indicated in Section 13.

7. HANDLING AND STORAGE

Handle in accordance with good industrial hygiene and safety practice. Do not contaminate Handling

other pesticides, fertilizers, water, food, or feed by storage or disposal.

Keep away from open flames, hot surfaces and sources of ignition. Keep in a dry, cool and Storage

well-ventilated place. Keep out of reach of children and animals. Keep/store only in original

container.

Incompatible products None known

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering measures Apply technical measures to comply with the occupational exposure limits. When working in

confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for

breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

Eye/Face Protection For dust, splash, mist or spray exposure, wear chemical protective goggles.

Skin and Body Protection Wear long-sleeved shirt, long pants, socks, and shoes.

Protective gloves **Hand Protection**

For dust, splash, mist or spray exposures wear a filtering mask. **Respiratory Protection**

Clean water should be available for washing in case of eye or skin contamination. Remove Hygiene measures

and wash contaminated clothing before re-use. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Launder work clothing

separately from regular household laundry.

If the product is used in mixtures, it is recommended that you contact the appropriate **General information**

protective equipment suppliers.

9. PHYSICAL AND CHEMICAL PROPERTIES

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Information on basic physical and chemical properties

Appearance Brown Liquid Physical State Liquid Color Brown

Sweet earthy odor Odor No information available Odor threshold

4.7 - 7.5 рH

Not applicable Melting point/freezing point

Boiling Point/Range No information available

Flash point Not applicable

Evaporation Rate No information available Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit: No information available Lower flammability limit: No information available Vapor pressure No information available No information available Vapor density **Density** 1.20 ± 0.6 g/mL

Specific gravity No information available

Water solubility Soluble in water

Solubility in other solvents No information available **Partition coefficient** No information available **Autoignition temperature** No information available No information available **Decomposition temperature** Viscosity, kinematic No information available Viscosity, dynamic No information available **Explosive properties** No information available **Oxidizing properties** No information available No information available Molecular weight No information available **Bulk density**

10. STABILITY AND REACTIVITY

Reactivity None under normal use 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 None known Incompatible materials None known.

Hazardous Decomposition Products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral > 5000 mg/kg (rat) > 2000 mg/kg (rat) LD50 Dermal LC50 Inhalation > 5.34 mg/L (rat)

Serious eye damage/eye irritation Skin corrosion/irritation

Slightly or non-irritating (rabbit). Slightly or non-irritating (rabbit).

Sensitization Non-sensitizing

Information on toxicological effects

None known. **Symptoms**

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

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Chronic toxicity

No known effect based on information supplied

Mutagenicity No information available

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
Aspiration hazard
No information available.
No information available.
No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

Persistence and degradability

Bioaccumulation

No information available.

Mobility

No information available.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these

wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance. Proper personal protective equipment, as described in

Sections 7 and 8, must be worn while handling materials for waste disposal.

Contaminated PackagingContainers must be disposed of in accordance with local, state and federal regulations.

Refer to the product label for container disposal instructions.

14. TRANSPORT INFORMATION

DOT This material is not a hazardous material as defined by U.S. Department of Transportation

at 49 CFR Parts 100 through 185.

TDG Not regulated

ICAO/IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard No
Chronic health hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

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Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

FIFRA Information

This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION

Harmful if swallowed, inhaled or absorbed through skin.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

International Inventories

Mexico - Grade Slight risk, Grade 1

WHMIS Statement

This product has been classified in accordance with the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

WHMIS Hazard Class Non-controlled

16. OTHER INFORMATION

NFPA	Health Hazards 1	Flammability 0	Instability 0	Special Hazards -
HMIS	Health Hazards 1	Flammability 0	Physical hazard 0	Personal Protection X

NFPA/HMIS Ratings Legend Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

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Reason for revision: (M)SDS sections updated

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Prepared By:

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End of Safety Data Sheet