

MONSANTO COMPANYSafety Data Sheet
Commercial Product**Section 1. Product and Company Identification****Product Name:** Acceleron® DX-910 Biological Fungicide Seed Treatment**EPA Registration No.** 71840-5-524**Hazardous Material Information System:**

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	X

Manufacturer Information:

MONSANTO COMPANY, 800 N. Lindbergh Blvd., St. Louis, MO, 63167

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Emergency numbers

FOR CHEMICAL EMERGENCY, SPILL LEAK, FIRE, EXPOSURE, OR ACCIDENT Call CHEMTREC - Day or Night: 1-800-424-9300 toll free in the continental U.S., Puerto Rico, Canada, or Virgin Islands. For calls originating elsewhere: 703-527-3887 (collect calls accepted).

FOR MEDICAL EMERGENCY - Day or Night: +1 (314) 694-4000 (collect calls accepted).

Section 2. Hazards Identification**Emergency Overview:** May cause respiratory tract, eye, and skin irritation.**Potential Acute Health Effects:**

Eyes: Short term harmful effects are not expected. However, prolonged or repeated contact may result in irritation.

Skin: Short term harmful effects are not expected. However, prolonged or repeated contact may result in mechanical irritation.

Inhalation: Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization. Short term harmful effects are not expected. However, exposure to vapors or mist may cause coughing or wheezing when inhaled.

Ingestion: Not an intended route of exposure. Short term harmful effects are not expected. However, Ingestion of large quantities may be harmful.

Section 3. Composition/Information on Ingredients

Component	CAS Number	Weight Percentage
<i>Bacillus subtilis</i> , MBI600 a naturally occurring species	68038-70-0	5%
Glycerin	56-81-5	Proprietary
Water based mixture	Proprietary	Proprietary

The exact composition of this material is a trade secret and contains no other components or impurities which will influence the classification with regard to human and environmental risk assessment.

Section 4. First Aid Measures

Eye Contact: Immediately flush eyes with water for at least 15 minutes.
Skin Contact: Wash with soap and water. If irritation develops seek medical attention.
Inhalation: Move to fresh air. Seek medical attention if irritation develops.
Ingestion: Seek medical attention.

Section 5. Fire Fighting Measures

Flammability of Product: Not a fire or explosion hazard.
Fire Fighting Media: Foam, alcohol foam, CO₂, dry chemical, water fog.
Fire Fighting Precautions and Hazards: No special equipment needed beyond standard fire fighting equipment and procedures.

Section 6. Accidental Release Measures

Clean-Up Procedures: Collect spilled material with an inert absorbent such as sand or vermiculite. Place in properly labeled and closed container. Dispose of collected material according to federal, state/provincial and local environmental regulations.
Spills and Leaks: Contain the spill or leak to prevent discharges to surface streams or storm sewers.

Section 7. Handling and Storage

Handling: Avoid breathing mist. General mechanical ventilation can be expected to effectively remove and prevent build up of any vapor or mist generated from handling this product in a closed environment. Protect eyes to prevent contact. Avoid prolonged or repeated exposure to skin.
Storage: Store in a dry place.

Section 8. Exposure Control/Personal Protection

Occupational Exposure Limits

Component	CAS Number	OSHA PEL	ACGIH TLV	Weight Percent
<i>Bacillus subtilis</i> , MBI600 a naturally occurring species	68038-70-0	none established	none established	5%
Glycerin	56-81-5	As Glycerin mist 10 mg/m ³ TWA/TLV	As Glycerin mist 10 mg/m ³ TWA/TLV	Proprietary
Water based mixture	Proprietary	none established	none established	Proprietary

Engineering controls: General mechanical ventilation can be expected to effectively remove and prevent build up of any vapor or mist generated from handling this product in a closed environment.

Personal Protection:

Eyes: Wear safety glasses . Wear additional eye protection such as chemical goggles or face shield if splashing or spraying hazard exists. Have an eye wash station available.
Body: To prevent skin contact wear long-sleeved shirt and long pants; shoes plus socks.
Hands: Avoid skin contact by using waterproof gloves.

Respiratory: As a general precaution when exposed to concentrations of living microbial products such as this, all mixers/loaders and applicators should wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95 or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

Other: Open wounds or skin surface disruptions should be covered with a chemical resistant patch to minimize absorption risks. Clean clothing should be worn daily to avoid possible long-term build up of the product leading to chronic overexposure.

Section 9. Physical and Chemical Properties

Odor	Musty odor	Vapor Density	Heavier than air
Color	Beige or off-white	Evaporation Rate	Slower than ether
Physical state	Liquid	Specific Gravity (H₂O = 1)	Approximately 1.16 g/mL
pH	not available	Solubility	Water dispersible
Melting/Freezing Point	not available		

Section 10. Stability and Reactivity

Chemical Stability: This material is stable under normal storage and handling conditions.

Hazardous Decomposition: When involved in a fire, burning may evolve noxious fumes which may include carbon monoxide, carbon dioxide, nitrous oxides, acetic acid, or other toxic compounds depending on the chemical composition and combustion conditions. However, all of the water must be driven off first for this to occur.

Hazardous
Polymerization: Is not known to occur.

Incompatibility (Materials to Avoid): Long term storage in direct contact with reactive metals such as aluminum, zinc, copper, nickel, magnesium, etc. Other materials to avoid include strong oxidizing agents, disinfectants, biocides.
Avoid extremes in temperature.

Section 11. Toxicological Information

Chronic Toxicity: None known
Mutagenic Effects: None known
Teratogenic Effects: None known
Developmental Toxicity: None known

Acute Effects on Humans: May cause skin, eye, and respiratory irritation.
Sensitization: Repeated or prolonged exposure to the substance at concentration above the exposure limits may cause respiratory tract and lung sensitization.

Carcinogenic Effects: This material is not known to cause cancer in animals or humans.

Existing Medical Conditions Aggravated By Exposure: May provoke asthmatic response in persons with asthma who are sensitive to airway irritants.

Section 12. Ecological Information

Ecotoxicity: No data available, however the material is not expected to have any deleterious toxic effect.

Environmental Fate: No data available regarding the environmental fate or biodegradation

Section 13. Disposal Considerations

EPA Waste Number: Not a hazardous waste.

Product and container disposal: Follow label directions.
Dispose of according to all federal, state/provincial and local environmental regulations.

Section 14. Transport Information

D.O.T. Classification: Not regulated

IMO/IMDG Classification: Not regulated

IATA Classification: Not regulated

Section 15. Regulatory Information

US Federal Regulations:

EPA Registration No. 71840-5

TSCA Toxic Substances Control Act	All ingredients are listed or exempt from the requirement.
SARA Superfund Amendment and Reauthorization Act	
EPCRA Emergency Planning & Community Right-to-Know Act	
Section 302 Extremely Hazardous Substances	None of the chemicals in this product are listed.
Section 311 and 312 Hazards	<i>Acute:</i> Yes <i>Chronic:</i> No <i>Fire:</i> No <i>Pressure:</i> No <i>Reactive:</i> No
Section 313 Toxic Chemical Release Inventory	No reportable quantities of toxic chemical(s) subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372 are present
CERCLA Hazardous substances	None of the chemicals in this product have an RQ.
Clean Air Act	This material does not contain any hazardous air pollutants, nor any Class 1, 2 ozone depleters.
Clean Water Act	None of the chemicals in this product are listed as Hazardous Substances, Priority or Toxic Pollutants under the CWA.
California Proposition 65 Carcinogens & Reproductive Toxicity (CRT) List:	This product is not known to the State of California to cause cancer or birth defects
OSHA Regulatory Status:	This product is considered hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200).

Section 16. Other Information

Revision:	2.0
Revision date:	13-OCT-2011
Supersedes:	20-SEP 2010

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This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPAAPPROVED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.