

**MONSANTO COMPANY**Safety Data Sheet  
Commercial Product**SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION****Product Name** Acceleron® DX-309 Fungicide Seed Treatment**EPA Registration No.** 264-935-524**Company**

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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***NOTE: Please refer to Section 11 for detailed toxicological information.***Emergency Overview**Warning! Harmful if swallowed or absorbed through skin. Causes skin irritation.  
Moderate eye irritation. Do not get in eyes, on skin, or on clothing. Avoid  
inhalation of vapour or mist.**Physical State**

liquid

**Odor**

musty

**Appearance**

light brown

**Routes of Exposure**

Skin Absorption, Skin contact, Eye contact, Ingestion, Inhalation

**Immediate Effects****Eye**

Moderate eye irritation. Do not get in eyes.

**Skin**Causes skin irritation. Harmful if absorbed through skin. Do not get on skin or  
clothing.**Ingestion**

Harmful if swallowed. Do not take internally.

**Inhalation**

Avoid inhalation of vapour or mist.

**Chronic or Delayed  
Long-Term**

This product or its components may have target organ effects.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Metalaxyl	57837-19-1	28.35
Attapulgite clay	12174-11-7	0.40

**SECTION 4. FIRST AID MEASURES**

<b>General</b>	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<b>Eye</b>	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 physician or poison control center immediately.
<b>Skin</b>	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.
<b>Inhalation</b>	Move 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 physician or poison control center immediately.
<b>Notes to Physician Treatment</b>	Treat symptomatically. There is no specific antidote.

**SECTION 5. FIRE FIGHTING MEASURES**

<b>Flash point</b>	> 93.4 °C / > 200.1 °F
<b>Fire and Explosion Hazards</b>	In the event of fire the following may be released: Nitrogen oxides (NOx) Carbon dioxide (CO2) Carbon monoxide (CO)
<b>Suitable Extinguishing Media</b>	Foam, Dry chemical, Carbon dioxide (CO2)
<b>Fire Fighting Instructions</b>	Keep out of smoke. Fight fire from upwind position. Cool closed containers/ tanks exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.  Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.
<b>Additional Advice</b>	Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal.

**SECTION 7. HANDLING AND STORAGE**

<b>Handling Procedures</b>	Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.
<b>Storing Procedures</b>	Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.
<b>Work/Hygienic Procedures</b>	<p>Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.</p> <p>Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.</p>
<b>Min/Max Storage Temperatures</b>	<p>Recommended minimum transport/storage temperature: 0 °C / 32 °F</p> <p>Recommended maximum transport/storage temperature: 35 °C / 95 °F</p>

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>General Protection</b>	<p>Follow all label instructions. Train employees in safe use of the product.</p> <p>Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.</p>
<b>Eye/Face Protection</b>	Tightly fitting safety goggles
<b>Hand protection</b>	Chemical resistant nitrile rubber gloves
<b>Body Protection</b>	Wear long-sleeved shirt and long pants and shoes plus socks.
<b>Respiratory Protection</b>	When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

**Exposure Limits**

Metalaxyl	57837-19-1	TX ESL	ST ESL	50 ug/m3
		TX ESL	AN ESL	5 ug/m3
Kaolin	1332-58-7	ACGIH	TWA	2 mg/m3
		NIOSH	REL	5 mg/m3
		NIOSH	REL	10 mg/m3
		US CA OEL	TWA PEL	2 mg/m3
		TX ESL	ST ESL	20 ug/m3
		TX ESL	AN ESL	2 ug/m3
			TWA	10 mg/m3
			TWA	5 mg/m3

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	light brown
<b>Physical State</b>	liquid
<b>Odor</b>	musty
<b>pH</b>	5.0 - 8.0 (100 %)
<b>Density</b>	1.10 g/cm <sup>3</sup> at 20 °C
<b>Water solubility</b>	miscible

**SECTION 10. STABILITY AND REACTIVITY**

<b>Conditions to Avoid</b>	Extremes of temperature and direct sunlight.
<b>Incompatibility</b>	Strong acids Strong bases Oxidizing agents
<b>Hazardous Reactions</b>	Stable under recommended storage conditions.

**SECTION 11. TOXICOLOGICAL INFORMATION**

Only acute toxicity studies have been performed on the formulated product. The non-acute information pertains to the technical-grade active ingredient, metalaxyl.

<b>Acute Oral Toxicity</b>	rat: LD50: > 2,900 mg/kg
<b>Acute Dermal Toxicity</b>	rabbit: LD50: > 2,000 mg/kg
<b>Acute Inhalation Toxicity</b>	rat: LC50: > 21.94 mg/l Exposure time: 1 h No deaths
<b>Skin Irritation</b>	Moderate skin irritation.

**Eye Irritation**                      Moderate eye irritation.

**Chronic Toxicity**                      Metalaxyl caused liver effects in chronic studies in mice, rats and/or dogs.

**Assessment Carcinogenicity**

Metalaxyl was not carcinogenic in lifetime feeding studies in rats and mice.

**ACGIH**

None.

**NTP**

None.

**IARC**

Attapulgitic clay

12174-11-7

Overall evaluation: 2B

Attapulgitic clay

12174-11-7

Overall evaluation: 3

**OSHA**

None.

**Reproductive & Developmental Toxicity**

**REPRODUCTION:** Metalaxyl did not cause reproductive toxicity in a multi-generation study in rats.

**DEVELOPMENTAL TOXICITY:** Metalaxyl is not considered a primary developmental toxicant in laboratory animals. Developmental effects were observed only at doses that caused maternal toxicity.

**Neurotoxicity**

Metalaxyl neurotoxicity studies are not required at this time.

**Mutagenicity**

Metalaxyl was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

**SECTION 12. ECOLOGICAL INFORMATION**

**Environmental Precautions**

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor runoff or drift. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**General Disposal Guidance**

Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility. Open dumping is prohibited.

**Container Disposal**

Do not re-use empty containers. Triple rinse containers. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

**RCRA Information**

**Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.**

**SECTION 14. TRANSPORT INFORMATION**

According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.

FREIGHT CLASSIFICATION: INSECTICIDES OR FUNGICIDES, N.O.I.; OTHER THAN POISON

**SECTION 15. REGULATORY INFORMATION**

**EPA Registration No.** 264-935-524

**US Federal Regulations**

**TSCA list**

None.

**US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)**

None.

**SARA Title III - Section 302 - Notification and Information**

None.

**SARA Title III - Section 313 - Toxic Chemical Release Reporting**

None.

**US States Regulatory Reporting**

**CA Prop65**

This product contains a chemical known to the State of California to cause cancer.

Attapulgitic clay 12174-11-7

This product does not contain any substances known to the State of California to cause reproductive harm.

**US State Right-To-Know Ingredients**

Attapulgitic clay 12174-11-7 CA

**Canadian Regulations**

**Canadian Domestic Substance List**

None.

**Environmental**

**CERCLA**

None.

**Clean Water Section 307 Priority Pollutants**

None.

**Safe Drinking Water Act Maximum Contaminant Levels**

None.

**SECTION 16. OTHER INFORMATION**

NFPA 704 (National Fire Protection Association):

Health - 2      Flammability – 1      Reactivity - 0      Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide):

Health - 1      Flammability – 1      Physical Hazard - 0      PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason to Revise: Updated for general editorial purposes.

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This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED 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.