

## APRON XL® 350ES

Date: 11/9/2017  
Replaces: 5/4/2016

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### 1. PRODUCT IDENTIFICATION

Product identifier on label: **APRON XL® 350ES**  
Product No.: A9642D  
Use: Fungicide  
Manufacturer: Syngenta Crop Protection, LLC  
Post Office Box 18300  
Greensboro NC 27419  
Manufacturer Phone: 1-800-334-9481

**Emergency Phone: 1-800-888-8372**

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### 2. HAZARDS IDENTIFICATION

Classifications: Oral: Category 4  
Eye Damage/Irritation: Category 2A  
Signal Word (OSHA): Warning  
Hazard Statements: Harmful if swallowed  
Causes serious eye irritation

Hazard Symbols:



Precautionary Statements: Wash hands and face thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Wear eye protection.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice.  
If swallowed: Call a poison center, doctor or Syngenta if you feel unwell. Rinse mouth.  
Dispose of contents and container in accordance with local regulations.

Other Hazard Statements: None

## APRON XL® 350ES

Date: 11/9/2017  
Replaces: 5/4/2016

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common Name	CAS Number	Concentration
1,2-Propanediol	Propylene Glycol	57-55-6	<20%
Surfactant	Surfactant	90093-37-1	<5%
Surfactant	Surfactant	99734-09-5	<5%
Other ingredients	Other ingredients	Trade Secret	>37.2%
(R,S)-2-[(2,6-dimethylphenyl)-methoxyacetylamino]-propionic acid methyl ester	Metalaxyl-M	70630-17-0 & 69516-34-3	32.8%

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

### 4. FIRST AID MEASURES

Have the product container, label or Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

**Ingestion:** If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Eye Contact:** If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

**Skin Contact:** If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

**Inhalation:** 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 Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

Most important symptoms/effects:

Eye irritation

Indication of immediate medical attention and special treatment needed:

There is no specific antidote if this product is ingested.

Treat symptomatically.

### 5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards:

None known.

Special protective equipment and precautions for firefighters:

Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

## APRON XL® 350ES

Date: 11/9/2017  
 Replaces: 5/4/2016

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:  
 Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

### 7. HANDLING AND STORAGE

Precautions for safe handling:

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Conditions for safe storage, including any incompatibilities:

Not Applicable

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.**

**FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.**

Occupational Exposure Limits:

Chemical Name	OSHA PEL	ACGIH TLV	Other	Source
Propylene Glycol	Not Established	Not Established	10 mg/m <sup>3</sup> TWA	AIHA
Surfactant	Not Established	Not Established	Not Established	Not Applicable
Surfactant	Not Established	Not Established	Not Established	Not Applicable
Other ingredients	Not Established	Not Established	Not Established	Not Applicable
Metalaxyl-M	Not Established	Not Established	5 mg/m <sup>3</sup> TWA	Syngenta

Appropriate engineering controls:

Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

Ingestion:

Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact:

Where eye contact is likely, use splash-proof chemical goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Skin Contact:

Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant

## APRON XL® 350ES

Date: 11/9/2017  
Replaces: 5/4/2016

footwear.

Inhalation:

A combination particulate/organic vapor respirator should be used until effective engineering controls are installed to comply with occupational exposure limits, or until exposure limits are established. Use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE filter.

Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow liquid  
Odor: Sweetish aromatic  
Odor Threshold: Not Available  
pH: 4.1 @ 1% w/v  
Melting point/freezing point: Not Available  
Initial boiling point and boiling range: 100 °C  
Flash Point (Test Method): >100°C  
Flammable Limits (% in Air): Not Available  
Flammability: Not Available  
Vapor Pressure: Metalaxyl-M 2.5 x 10<sup>(-5)</sup> mmHg @ 77°F (25°C)  
Vapor Density: Not Available  
Relative Density: 1.067 g/cc typical @ 68°F (20°C)  
Solubility (ies): Metalaxyl-M 26 g/l @ 77°F (25°C)  
Partition coefficient: n-octanol/water: Not Available  
Autoignition Temperature: 425°C  
Decomposition Temperature: Not Available  
Viscosity: 41.2mPa @ 68°F (20°C)  
Other: None

### 10. STABILITY AND REACTIVITY

Reactivity: Not reactive.  
Chemical stability: Stable under normal use and storage conditions.  
Possibility of hazardous reactions: Will not occur.  
Conditions to Avoid: None known.  
Incompatible materials: None known.  
Hazardous Decomposition Products: Not Available

## APRON XL® 350ES

Date: 11/9/2017  
 Replaces: 5/4/2016

### 11. TOXICOLOGICAL INFORMATION

#### Health effects information

Likely routes of exposure: Dermal, Inhalation

Symptoms of exposure: Eye irritation

Delayed, immediate and chronic effects of exposure: Eye irritation

#### Numerical measures of toxicity (acute toxicity/irritation studies (finished product))

Ingestion:	Oral (LD50 Female Rat) :	1,150 mg/kg body weight
Dermal:	Dermal (LD50 Rat) :	> 4,000 mg/kg body weight
Inhalation:	Inhalation (LC50 Rat) :	> 3.721 mg/l - 4 hours (derived from active ingredient(s))
Eye Contact:	Irritating (Rabbit) (based on results from similar product[s])	
Skin Contact:	Non-Irritating (Rabbit)	
Skin Sensitization:	Not a Sensitizer (Guinea Pig)	

#### Reproductive/Developmental Effects

Metalaxyl-M: None observed.

#### Chronic/Subchronic Toxicity Studies

Metalaxyl-M: Liver effects at high dose animal tests.

#### Carcinogenicity

Metalaxyl-M: None observed.

Chemical Name	NTP/IARC/OSHA Carcinogen
1,2-Propanediol	No
Surfactant	No
Surfactant	No
Other ingredients	No
(R,S)-2-[(2,6-dimethylphenyl)-methoxyacetylamino]-propionic acid methyl ester	No

#### Other Toxicity Information

Not Available

#### Toxicity of Other Components

Other ingredients

Not Established

Propylene Glycol

Reported to cause central nervous system depression (anesthesia, dizziness, confusion), headache and nausea. Also, eye irritation may occur with lacrimation but no residual discomfort or injury. Prolonged contact to skin may cause mild to moderate irritation and possible allergic reactions. Chronic dietary exposure caused kidney and liver injury in experimental animals.

## APRON XL® 350ES

Date: 11/9/2017

Replaces: 5/4/2016

### Surfactant

Exposure causes severe skin and eye irritation with possible tissue destruction. Inhalation can result in respiratory tract irritation. Ingestion may cause nausea, diarrhea and/or abdominal cramps.

### Surfactant

Exposure can result in slight irritation to skin and mild irritation to eyes with redness and tearing. Ingestion may cause nausea, diarrhea and abdominal cramps.

### Target Organs

#### Active Ingredients

Metalaxyl-M: Liver

#### Inert Ingredients

Other ingredients: Not Established

Propylene Glycol: CNS, kidney, liver

Surfactant: Lung

Surfactant: Eye, skin

## 12. ECOLOGICAL INFORMATION

### Eco-Acute Toxicity

#### Metalaxyl-M:

Fish (Rainbow Trout) 96-hour LC50 > 121 ppm

Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 > 113 ppm

Bird (Bobwhite Quail) 14-day LD50 981 mg/kg

### Environmental Fate

#### Metalaxyl-M:

The information presented here is for the active ingredient, metalaxyl-m.

Does not bioaccumulate. Not persistent in soil or water. Moderate mobility in soil. Mixes/sinks (after 24 h).

## 13. DISPOSAL CONSIDERATIONS

### Disposal:

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

## 14. TRANSPORT INFORMATION

### DOT Classification

Ground Transport - NAFTA

Not regulated

### Comments

Water Transport - International

Not regulated

Air Transport

Not regulated

**APRON XL® 350ES**

Date: 11/9/2017  
 Replaces: 5/4/2016

**15. REGULATORY INFORMATION**

Pesticide Registration:

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:

Warning: Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. 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.

EPA Registration Number(s):  
 100-1565

EPCRA SARA Title III Classification:

Section 311/312 Hazard Classes: See Section 2 Hazards  
 Section 313 Toxic Chemicals: None

CERCLA/SARA 304 Reportable Quantity (RQ):

Not Applicable

RCRA Hazardous Waste Classification (40 CFR 261):

Not Applicable

TSCA Status:

TSCA R & D Exempt

**16. OTHER INFORMATION**

NFPA Hazard Ratings

Health: 2  
 Flammability: 1  
 Instability: 0

HMIS Hazard Ratings

Health: 2  
 Flammability: 1  
 Reactivity: 0

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme
*	Chronic

Syngenta Hazard Category: B,S

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 2/9/2016

Revision Date: 11/9/2017

Replaces: 5/4/2016

Section(s) Revised: 8, 15

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.