

APRON XL 350 ES

Version 7 - This version replaces all previous versions.

Revision Date 11.01.2012

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SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier**Product name : **APRON XL 350 ES**

Design code : A9642C

1.2 Relevant identified uses of the substance or mixture and uses advised againstUse : Fungicide
Seed treatment**1.3 Details of the supplier of the safety data sheet**Company : Syngenta Crop Protection AG
Postfach
CH-4002 Basel
Switzerland

Telephone : +41 61 323 11 11

Telefax : +41 61 323 12 12

E-mail address : sds.ch@syngenta.com

1.4 Emergency telephone number**Emergency tele-
phone number** : +44 1484 538444**SECTION 2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

Classification according to Regulation (EU) 1272/2008

Acute toxicity (Oral)	Category 4	H302
Eye irritation	Category 2	H319
Chronic aquatic toxicity	Category 3	H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xn, Harmful

R22: Harmful if swallowed.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms



Signal word	:	Warning	
Hazard statements	:	H302 H319 H412	Harmful if swallowed. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.
Precautionary statements	:	P102 P280 P302 + P352 P305 + P351 + P338	Keep out of reach of children. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental information	:	EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Hazardous components which must be listed on the label:

- metalaxyl-M

Labelling: EU Directives 67/548/EEC or 1999/45/EC

Symbol(s)



Harmful

R-phrases(s)	:	R22 R52/53	Harmful if swallowed. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrases(s)	:	S 2 S13 S20/21 S35 S57	Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. This material and its container must be disposed of in a safe way. Use appropriate container to avoid environmental contamination.

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Additional Labelling : To avoid risks to man and the environment, comply with the instructions for use.

Hazardous components which must be listed on the label:

- metalaxyl-M

2.3 Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration
metalaxyl-M	70630-17-0	Xn R22 R41	Acute Tox.4; H302 Eye Dam.1; H318	32 % W/W
propane-1,2-diol	57-55-6 200-338-0	-	-	10 - 20 % W/W
poly(oxy-1,2-ethanediyl), -[2,4,6-tris(1-phenylethyl)phenyl]- -hydroxy-	99734-09-5 70559-25-0	R52/53	Aquatic Chronic3; H412	1 - 5 % W/W
poly(oxy-1,2-ethanediyl), al- pha-phosphonome- ga-[2,4,6-tris(1-phenylethyl)phenoxy]-	90093-37-1 114535-82-9 618-446-5	Xi R36	Eye Irrit.2; H319	1 - 5 % W/W

Substances for which there are Community workplace exposure limits.

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice : Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control center or physician, or going for treatment.

Inhalation : Move the victim to fresh air.
If breathing is irregular or stopped, administer artificial respiration.
Keep patient warm and at rest.
Call a physician or poison control centre immediately.

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- Skin contact : Take off all contaminated clothing immediately.
Wash off immediately with plenty of water.
If skin irritation persists, call a physician.
Wash contaminated clothing before re-use.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses.
Immediate medical attention is required.
- Ingestion : If swallowed, seek medical advice immediately and show this container or label.
Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

- Medical advice : There is no specific antidote available.
Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES**5.1 Extinguishing media**

Extinguishing media - small fires
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Extinguishing media - large fires
Alcohol-resistant foam
or
Water spray

Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).
Exposure to decomposition products may be a hazard to health.

5.3 Advice for firefighters

Wear full protective clothing and self-contained breathing apparatus.

Do not allow run-off from fire fighting to enter drains or water courses.
Cool closed containers exposed to fire with water spray.

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SECTION 6. ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautionsPrevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system.**6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

If the product contaminates rivers and lakes or drains inform respective authorities.

6.4 Reference to other sectionsRefer to protective measures listed in sections 7 and 8.
Refer to disposal considerations listed in section 13.

SECTION 7. HANDLING AND STORAGE**7.1 Precautions for safe handling**No special protective measures against fire required.
Avoid contact with skin and eyes.
When using do not eat, drink or smoke.
For personal protection see section 8.**7.2 Conditions for safe storage, including any incompatibilities**No special storage conditions required.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep out of the reach of children.
Keep away from food, drink and animal feedingstuffs.

: Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

7.3 Specific end uses

Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
propane-1,2-diol	10 mg/m ³ (Particulates) 150 ppm, 470 mg/m ³ (Total (vapour & particulates))	8 h TWA 8 h TWA	UK HSE UK HSE
metalaxyl-M	10 mg/m ³	8 h TWA	SYNGENTA

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.

8.2 Exposure controls

- Engineering measures : Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.
The extent of these protection measures depends on the actual risks in use.
If airborne mists or vapors are generated, use local exhaust ventilation controls.
Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.
Where necessary, seek additional occupational hygiene advice.
- Protective measures : The use of technical measures should always have priority over the use of personal protective equipment.
When selecting personal protective equipment, seek appropriate professional advice.
Personal protective equipment should be certified to appropriate standards.
- Respiratory protection : No personal respiratory protective equipment normally required.
A particulate filter respirator may be necessary until effective technical measures are installed.
- Hand protection : Chemical resistant gloves are not usually required.
Select gloves based on the physical job requirements.
- Eye protection : Eye protection is not usually required.
Follow any site specific eye protection policies.
- Skin and body protection : No special protective equipment required.
Select skin and body protection based on the physical job requirements.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Physical state	: liquid
Form	: liquid
Colour	: light red to dark red
Odour	: weak
Odour Threshold	: no data available
pH	: 5 - 8 at 1 % w/v (20 - 25 °C)
Melting point/range	: no data available
Boiling point/boiling range	: > 90 °C at 1,013.25 hPa
Flash point	: at 997 hPa DIN 51758
Evaporation rate	: no data available
Flammability (solid, gas)	: no data available
Lower explosion limit	: no data available
Upper explosion limit	: no data available
Vapour pressure	: no data available
Relative vapour density	: no data available
Density	: 1.1 g/cm ³ at 20 - 25 °C
Solubility in other solvents	: Miscible

Partition coefficient: n-octanol/water	: no data available
Autoignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, dynamic	: 22.44 mPa.s at 40 °C : 51.89 mPa.s at 20 °C : < 200 mPa.s at 20 - 25 °C
Viscosity, kinematic	: no data available
Explosive properties	: Not explosive
Oxidizing properties	: no data available

9.2 Other information

Miscibility	: Miscible
Surface tension	: 30.0 - 30.8 mN/m at 20 °C

SECTION 10. STABILITY AND REACTIVITY**10.1 Reactivity**

No information available.

10.2 Chemical stability

No information available.

10.3 Possibility of hazardous reactions

None known.

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

No information available.

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10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

Combustion or thermal decomposition will evolve toxic and irritant vapors.

SECTION 11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects**

Acute oral toxicity	:	LD50 rat, > 1,000 - < 3,000 mg/kg
Acute dermal toxicity	:	LD50 rat, > 4,000 mg/kg
Skin corrosion/irritation	:	rabbit: Non-irritating
Serious eye damage/eye irritation	:	rabbit: Non-irritating
Respiratory or skin sensitization	:	guinea pig: not sensitizing
Germ cell mutagenicity metalaxyl-M	:	Did not show mutagenic effects in animal experiments.
Carcinogenicity metalaxyl-M	:	Did not show carcinogenic effects in animal experiments.
Teratogenicity metalaxyl-M	:	Did not show teratogenic effects in animal experiments.
Reproductive toxicity metalaxyl-M	:	Did not show reproductive toxicity effects in animal experiments.
STOT - repeated exposure metalaxyl-M	:	No adverse effect has been observed in chronic toxicity tests.

SECTION 12. ECOLOGICAL INFORMATION**12.1 Toxicity**

Toxicity to fish	:	LC50 Salmo trutta (trout), > 100 mg/l , 96 h
Toxicity to aquatic invertebrates	:	EC50 Daphnia magna (Water flea), 54.4 mg/l , 48 h
Toxicity to aquatic plants	:	ErC50 Desmodesmus subspicatus (green algae), > 100 mg/l , 72 h

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12.2 Persistence and degradability

Stability in water

metalaxyl-M : Degradation half life: 22.4 - 47.5 d
Not persistent in water.

Stability in soil

metalaxyl-M : Degradation half life: < 50 d
Not persistent in soil.

12.3 Bioaccumulative potential

metalaxyl-M : Low bioaccumulation potential.

12.4 Mobility in soil

metalaxyl-M : Metalaxyl has a range from low to very high mobility in soil depending on soil type.

12.5 Results of PBT and vPvB assessment

metalaxyl-M : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
This substance is considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects

None known.

SECTION 13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Product : Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
Where possible recycling is preferred to disposal or incineration.
If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging : Empty remaining contents.
Triple rinse containers.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

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SECTION 14. TRANSPORT INFORMATION

Land transport (ADR/RID)

Not dangerous goods

14.1 UN number:	not applicable
14.2 UN proper shipping name:	not applicable
14.3 Transport hazard class(es):	not applicable
14.4 Packing group:	not applicable
14.5 Environmental hazards	not applicable

Sea transport(IMDG)

Not dangerous goods

14.1 UN number:	not applicable
14.2 UN proper shipping name:	not applicable
14.3 Transport hazard class(es):	not applicable
14.4 Packing group:	not applicable
14.5 Environmental hazards	not applicable

Air transport (IATA-DGR)

Not dangerous goods

14.1 UN number:	not applicable
14.2 UN proper shipping name:	not applicable
14.3 Transport hazard class(es):	not applicable
14.4 Packing group:	not applicable

14.6 Special precautions for user

none

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

GHS-Labeling

Hazard pictograms

Signal word : **Warning**

Hazard statements	:	H302	Harmful if swallowed.
		H319	Causes serious eye irritation.

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	H412	Harmful to aquatic life with long lasting effects.
Precautionary statements	: P102 P280 P301 + P312 P305 + P351 + P338	Keep out of reach of children. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental information	: EUH401	To avoid risks to human health and the environment, comply with the instructions for use.
Remarks	:	Classified using all GHS hazard classes and categories. Where the GHS contains options, the most conservative option has been chosen. Regional or national implementations of GHS may not implement all hazard classes and categories.

Hazardous components which must be listed on the label:

- metalaxyl-M

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16. OTHER INFORMATION

Further information

Full text of R-phrases referred to under sections 2 and 3:

R22	Harmful if swallowed.
R36	Irritating to eyes.
R41	Risk of serious damage to eyes.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

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