AGRIMEC

Version 4 - This version replaces all previous versions.
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SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name : **AGRIMEC**

Design code : A8612AH

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use : Insecticide

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 : safetydatasheetcoordination@syngenta.com

1.4 Emergency telephone number

Emergency telephone 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 3	H301
Skin sensitization	Category 1	H317
Eye irritation	Category 2	H319
Reproductive toxicity	Category 1B	H360D
Specific target organ toxicity - repeated exposure	Category 1	H372
Acute aquatic toxicity	Category 1	H400
Chronic aquatic toxicity	Category 1	H410

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

T, Toxic
N, Dangerous for the environment
R61: May cause harm to the unborn child.
R22: Harmful if swallowed.
R36: Irritating to eyes.
R43: May cause sensitization by skin contact.
R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms

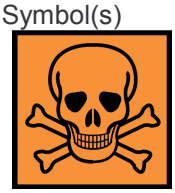
Signal word	:	Danger	
Hazard statements	:	H301	Toxic if swallowed.
		H317	May cause an allergic skin reaction.
		H319	Causes serious eye irritation.
		H360D	May damage the unborn child.
		H372	Causes damage to organs through prolonged or repeated exposure if swallowed.
		H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements	:	P102	Keep out of reach of children.
		P201	Obtain special instructions before use.
		P270	Do not eat, drink or smoke when using this product.
		P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
		P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
		P314	Get medical advice/ attention if you feel unwell.
		P391	Collect spillage.
		P501	Dispose of contents/ container to an approved waste disposal plant.
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:

- abamectin
- 1-methyl-2-pyrrolidone

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

Symbol(s)



Toxic

Dangerous for the environment

R-phrase(s)	:	R61	May cause harm to the unborn child.
		R22	Harmful if swallowed.
		R36	Irritating to eyes.
		R43	May cause sensitization by skin contact.
		R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
		R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	:	S53	Avoid exposure - obtain special instructions before use.
		S 2	Keep out of the reach of children.
		S13	Keep away from food, drink and animal feedingstuffs.
		S20/21	When using do not eat, drink or smoke.
		S35	This material and its container must be disposed of in a safe way.
		S36/37	Wear suitable protective clothing and gloves.
		S57	Use appropriate container to avoid environmental contamination.

Special labelling of certain mixtures : To avoid risks to man and the environment, comply with the instructions for use.

Hazardous components which must be listed on the label:
- abamectin
- hexan-1-ol
- 1-methyl-2-pyrrolidone

2.3 Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

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
hexan-1-ol	111-27-3 203-852-3	Xn R22	Acute Tox.4; H302	25 - 35 % W/W
1-methyl-2-pyrrolidone	872-50-4 212-828-1	T R61 R36/37/38	Repr.1B; H360D Eye Irrit.2; H319 STOT SE3; H335 Skin Irrit.2; H315	20 - 30 % W/W
abamectin	71751-41-2, 65195-56-4, 65195-55-3	N, T+ R26/28 R48/25 R50/53	Acute Tox.2; H300 Acute Tox.1; H330 STOT RE1; H372 Aquatic Acute1; H400 Aquatic Chronic1; H410	1.9 % W/W
2,6-di-tert-butyl-p-cresol	128-37-0, 31194-40-8 204-881-4			<= 1 % 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.

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 : Lack of coordination
Tremors
Dilatation of the pupil

4.3 Indication of any immediate medical attention and special treatment needed

Medical advice : This material is believed to enhance GABA activity in animals. It is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiaziphines, valproic acid) in patients with potentially toxic mectin exposure.
Toxicity can be minimized by early administration of chemical absorbents (e.g. activated charcoal).
If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parental fluid replacement therapy should be given, along with other required supportive measures as indicated by clinical signs, symptoms and measurements.

SECTION 5. FIRE-FIGHTING 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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Refer to protective measures listed in sections 7 and 8.
Keep people away from and upwind of spill/leak.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Remove all sources of ignition.
Pay attention to flashback.

6.2 Environmental precautions

Prevent 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 sections

Refer 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

Avoid contact with skin and eyes.
When using do not eat, drink or smoke.
Use only in an area containing flame proof equipment.
Take precautionary measures against static discharges.
For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep out of the reach of children.
Keep away from combustible material.
Keep in an area equipped with sprinklers.
Keep away from food, drink and animal feedingstuffs.
No smoking.

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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
abamectin	0.02 mg/m3	8 h TWA	SYNGENTA
1-methyl-2-pyrrolidone	20 ppm 20 ppm 100 ppm 25 ppm, 103 mg/m3 (Skin) 75 ppm, 309 mg/m3 (Skin) 10 ppm, 40 mg/m3 (Skin) 20 ppm, 80 mg/m3	8 h TWA 8 h TWA Short term exposure limit 8 h TWA 15 min STEL 8 h TWA 15 min STEL	DFG SUVA SUVA UK HSE UK HSE IOELV IOELV
2,6-di-tert-butyl-p-cresol	10 mg/m3 10 mg/m3 10 mg/m3 10 mg/m3	8 h TWA 8 h TWA 8 h TWA 8 h TWA	DFG SUVA ACGIH UK HSE

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 : A combination gas, vapor and particulate respirator may be necessary until effective technical measures are installed.
Protection provided by air-purifying respirators is limited.
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.

Hand protection	:	Chemical resistant gloves should be used. Gloves should be certified to an appropriate standard. Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure. The breakthrough time of gloves varies according to the thickness, material and manufacturer. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Suitable material Nitrile rubber
Eye protection	:	If eye contact is possible, use tight-fitting chemical safety goggles.
Skin and body protection	:	Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc.) Wear as appropriate: impervious protective suit

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	:	liquid
Form	:	liquid
Colour	:	yellow to red brown
Odour	:	no data available
Odour Threshold	:	no data available
pH	:	2.6 - 3.6 at 1 % w/v (20 - 25 °C)
Melting point/range	:	no data available
Boiling point/boiling range	:	no data available
Flash point	:	72.5 °C at 1,013.25 hPa DIN EN 22719
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	:	0.96 g/cm3
Solubility in other solvents	:	no data available
Partition coefficient: n-octanol/water	:	no data available
Autoignition temperature		no data available
Thermal decomposition	:	no data available
Viscosity, dynamic	:	19.0 mPa.s at 20 °C
Viscosity, dynamic	:	11.4 mPa.s at 40 °C
Viscosity, kinematic	:	no data available
Explosive properties	:	Not explosive
Oxidizing properties	:	not oxidizing

9.2 Other information

: no data available

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.

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 male and female rat, 300 mg/kg The toxicological data has been taken from products of similar composition.
Acute inhalation toxicity	:	LC50 male and female rat, 7.8 mg/l , 4 h The toxicological data has been taken from products of similar composition.
Acute dermal toxicity	:	LD50 male and female rabbit, > 2,000 mg/kg The toxicological data has been taken from products of similar composition.
Skin corrosion/irritation	:	rabbit: Non-irritating The toxicological data has been taken from products of similar composition.
Serious eye damage/eye irritation	:	rabbit: irritating The toxicological data has been taken from products of similar composition.
Respiratory or skin sensitization	:	guinea pig: A skin sensitizer in animal tests. The toxicological data has been taken from products of similar composition.

Germ cell mutagenicity

abamectin	:	Did not show mutagenic effects in animal experiments.

Carcinogenicity
abamectin : Did not show carcinogenic effects in animal experiments.

Reproductive toxicity
1-methyl-2-pyrrolidone : Experiments have shown reproductive toxicity effects on laboratory animals.
abamectin : Did not show reproductive toxicity effects in animal experiments.

STOT - repeated exposure
abamectin : Central nervous system effects in chronic/subchronic animal tests.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish : LC50 Oncorhynchus mykiss (rainbow trout), 0.13 mg/l , 96 h
Based on test results obtained with similar product.

Toxicity to aquatic invertebrates : EC50 Daphnia magna (Water flea), 0.029 mg/l , 48 h
Based on test results obtained with similar product.

Toxicity to aquatic plants : EbC50 Pseudokirchneriella subcapitata (green algae), > 82 mg/l , 72 h

: ErC50 Pseudokirchneriella subcapitata (green algae), > 82 mg/l , 72 h
Based on test results obtained with similar product.

12.2 Persistence and degradability

Biodegradability
abamectin : Not readily biodegradable.

12.3 Bioaccumulative potential

abamectin : Does not bioaccumulate.

12.4 Mobility in soil

abamectin : Abamectin has slight mobility in soil.

12.5 Results of PBT and vPvB assessment

: This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

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.

SECTION 14. TRANSPORT INFORMATION

Land transport (ADR/RID)

14.1 UN number:	UN 2902
14.2 UN proper shipping name:	PESTICIDE, LIQUID, TOXIC, N.O.S. (ABAMECTIN)
14.3 Transport hazard class(es):	6.1
14.4 Packing group:	III
Labels:	6.1
14.5 Environmental hazards :	Environmentally hazardous

Sea transport(IMDG)

14.1 UN number:	UN 2902
14.2 UN proper shipping name:	PESTICIDE, LIQUID, TOXIC, N.O.S. (ABAMECTIN)
14.3 Transport hazard class(es):	6.1
14.4 Packing group:	III
Labels:	6.1
14.5 Environmental hazards :	Marine pollutant

Air transport (IATA-DGR)

14.1 UN number:	UN 2902
14.2 UN proper shipping name:	PESTICIDE, LIQUID, TOXIC, N.O.S. (ABAMECTIN)
14.3 Transport hazard class(es):	6.1
14.4 Packing group:	III
Labels:	6.1

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-Labelling

Hazard pictograms

Signal word	:	Danger	
Hazard statements	:	H227	Combustible liquid
		H301	Toxic if swallowed.
		H317	May cause an allergic skin reaction.
		H319	Causes serious eye irritation.
		H360D	May damage the unborn child.
		H372	Causes damage to organs through prolonged or repeated exposure if swallowed.
		H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements	:	P102	Keep out of reach of children.
		P201	Obtain special instructions before use.
		P270	Do not eat, drink or smoke when using this product.
		P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
		P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
		P314	Get medical advice/ attention if you feel unwell.
		P391	Collect spillage.
		P501	Dispose of contents/ container to an approved waste disposal plant.
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:

- abamectin
- 1-methyl-2-pyrrolidone

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.
R26/28	Very toxic by inhalation and if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.
R48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R61	May cause harm to the unborn child.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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