

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

APACHE

Version: 0

Revision date: 02/10/2017



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SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING.

1.1 Product identifier.

Product Name: APACHE
Product number: HS-7232
Registry number: AUD-AD-140-1954
Composition: Abamectin 1.8% w/v EC

1.2 Relevant identified uses of the mixture and uses advised against.

INSECTICIDE/ACARICIDE

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company: **Industrias AFRASA, S.A.**
Address: CIUDAD DE SEVILLA 53. POL.IND. FUENTE DEL JARRO
City: PATERNA
Province: VALENCIA
Telephone: 961321700
Fax: 961321716
E-mail: afrasa@afrasa.es
Web: www.afrasa.es

1.4 Emergency telephone number: Agricultural materials company (Arab Emirates): +971 37641064 (24 hours)
Industrias Afrasa, S.A. +34 96 132 17 00 (Only available during office hours)

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the mixture.

In accordance with Regulation (EU) No 1272/2008:

Acute Tox. 4 : Harmful if swallowed.
Aquatic Acute 1 : Very toxic to aquatic life.
Aquatic Chronic 1 : Very toxic to aquatic life with long lasting effects.
Asp. Tox. 1 : May be fatal if swallowed and enters airways.
Eye Dam. 1 : Causes serious eye damage.
Flam. Liq. 3 : Flammable liquid and vapour.
STOT RE 2 : May cause damage to organs through prolonged or repeated exposure.
STOT SE 3 : May cause drowsiness or dizziness.

2.2 Label elements.

Labelling in accordance with Regulation (EU) No 1272/2008:

Pictograms:



Signal Word:

Danger

H statements:

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H318 Causes serious eye damage.

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H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

P statements:

P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P270	Do not eat, drink or smoke when using this product.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or a doctor.
P391	Collect spillage.
P501	Dispose of contents/container according to local or national regulations.

EUH statements:

EUH066	Repeated exposure may cause skin dryness or cracking.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Contains:

2-methylpropan-1-ol, iso-butanol
abamectin (combination of avermectin B1a and avermectin B1b) (ISO)
Calcium dodecylbenzene sulfonate
Hydrocarbons, C10, aromatics, <1% naphthalene

SP1: Do not contaminate water with the product or its packaging. (Do not clean the equipment with which to apply the product near surface water). Avoid contamination via drains farms and roads.

Wear personal protective equipment during mixing/loading of the product.
Wear personal protective equipment during application in greenhouses.
Do not apply by aircraft.

SPe3a: For protection of aquatic organisms do not apply to agricultural land adjacent to surface water.

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Not Applicable.

3.2 Mixtures.

Substances posing a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, assigned a Community exposure limit in the workplace, and classified as PBT/vPvB or included in the Candidate List:

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
			Classification	specific concentration limit
EC No: 918-811-1 Registration No: 01-2119463583-34-XXXX	Hydrocarbons, C10, aromatics, <1% naphthalene	25 - 75 %	Aquatic Chronic 2, H411 - Asp. Tox. 1, H304 - STOT SE 3, H336	-
CAS No: 26264-06-2 EC No: 247-557-8	Calcium dodecylbenzene sulfonate	1 - 3 %	Aquatic Chronic 4, H413 - Eye Dam. 1, H318 - Skin Irrit. 2, H315	-

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Index No: 606-143-00-0 CAS No: 71751-41-2	abamectin (combination of avermectin B1a and avermectin B1b) (ISO)	1 - 3 %	Acute Tox. 1, H330 - Acute Tox. 2, H300 - Aquatic Acute 1, H400 (M=10000) - Aquatic Chronic 1, H410 (M=10000) - Repr. 2, H361d - STOT RE 1, H372(sistema nervioso)	STOT RE 2, H373: 0,5 % ≤ C < 5 % STOT RE 1, H372: C ≥ 5 %
Index No: 603-108-00-1 CAS No: 78-83-1 EC No: 201-148-0 Registration No: 01-2119484609-23-XXXX	[1] 2-methylpropan-1-ol,iso-butanol	1 - 3 %	Eye Dam. 1, H318 - Flam. Liq. 3, H226 - STOT SE 3, H335 - STOT SE 3, H336 - Skin Irrit. 2, H315	-
CAS No: 128-37-0 EC No: 204-881-4 Registration No: 01-2119565113-46-XXXX	[1] 2,6-di-tert-butyl-p-cresol	0.25 - 2.5 %	Aquatic Chronic 1, H410 (M=1)	-

(*): The complete text of the H phrases is given in section 16 of this Safety Data Sheet.

[1] Substance with a Community workplace exposure limit (see section 8.1).

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration. Do not administer anything orally. If unconscious, place them in a suitable position and seek medical assistance.

Eye contact.

Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact.

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. **NEVER** use solvents or thinners.

Ingestion.

If accidentally ingested, seek immediate medical attention. Keep calm. **NEVER** induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed.

Corrosive Product, contact with eyes or skin can cause burns; ingestion or inhalation can cause internal damage, if this occurs immediate medical assistance is required.

Harmful Product, prolonged exposure due to inhalation may cause anaesthetic effects and the need for immediate medical assistance.

4.3 Indication of any immediate medical attention and special treatment needed.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

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SECTION 5: FIREFIGHTING MEASURES.

Flammable product, the necessary prevention measures should be taken in order to avoid risks, In case of fire, the following measures are recommended:

5.1 Extinguishing media.

Recommended extinguishing methods.

Extinguisher powder or CO₂. In case of more serious fires, also alcohol-resistant foam and water spray. Do not use a direct stream of water to extinguish.

5.2 Special hazards arising from the mixture.

Special risks.

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

Eliminate possible ignition points and ventilate the area. No smoking. Avoid breathing fumes. For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Product dangerous for the environment, in case of large spills or if the product contaminates lakes, rivers, or sewers, inform the responsible authorities according to local legislation. Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3 Methods and material for containment and cleaning up.

Pick up the spill with non-combustible absorbent materials (soil, sand, vermiculite, diatomite, etc.). Pour the product and the absorbent in an appropriate container. The contaminated area should be immediately cleaned with an appropriate decontaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

The fumes are heavier than air and can spread across the ground. They can form explosive mixtures with air. Prevent the creation of flammable or explosive fume concentrations in the air; prevent fume concentrations above work exposure limits. The product must only be used in areas where all unprotected flames and other ignition points have been eliminated. Electrical equipment has to be protected according to applicable standards.

The product can be electrostatically charged: always use earth grounds when transferring the product. Operators must use anti-static footwear and clothing, and floors must be conductors.

Keep the container tightly closed and isolated from heat sources, sparks, and fire. Do not use tools that can cause sparks. For personal protection, see section 8. Never use pressure to empty the containers. They are not pressure-resistant containers.

In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Observe indications on the label. Store the containers between 5 and 35° C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from

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oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorized persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

Classification and threshold amount of storage in accordance with Annex I to Directive 2012/18/EU (SEVESO III):

Code	Description	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
H2	ACUTE TOXIC	50	200
E1	ENVIRONMENTAL HAZARDS - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1	100	200
P5c	FLAMMABLE LIQUIDS	5.000	50.000

7.3 Specific end use(s).

Agricultural insecticide-acaricide for professional use.

Uses of the product indicated in the label.

Use reserved for farmers and professionals users.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

Work exposure limit for:

Name	CAS No.	Country	Limit value	ppm	mg/m ³
2-methylpropan-1-ol,iso-butanol	78-83-1	United Kingdom [1]	Eight hours	50	154
			Short term	75	231
2,6-di-tert-butyl-p-cresol	128-37-0	United Kingdom [1]	Eight hours		10
			Short term		

[1] According Limit Value (IOELV) list in 2nd Indicative Occupational Exposure adopted by Health and Safety Executive.

The product does NOT contain substances with Biological Limit Values.

Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Type	Value
2-methylpropan-1-ol,iso-butanol CAS No: 78-83-1 EC No: 201-148-0	DNEL (Workers)	Inhalation, Long-term, Local effects	310 (mg/m ³)
	DNEL (General population)	Inhalation, Long-term, Local effects	55 (mg/m ³)
2,6-di-tert-butyl-p-cresol CAS No: 128-37-0 EC No: 204-881-4	DNEL (Workers)	Inhalation, Long-term, Systemic effects	3,5 (mg/m ³)

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

Concentration levels PNEC:

Name	Details	Value
2-methylpropan-1-ol,iso-butanol CAS No: 78-83-1 EC No: 201-148-0	aqua (freshwater)	0,4 (mg/L)
	aqua (marine water)	0,04 (mg/L)
	aqua (intermittent releases)	11 (mg/L)
	STP	10 (mg/L)
	sediment (freshwater)	1,52 (mg/kg sediment dw)
	sediment (marine water)	0,152 (mg/kg sediment dw)
	soil	0,0699 (mg/kg soil dw)

PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.

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8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %		
Uses:	INSECTICIDE/ACARICIDE		
Breathing protection:			
PPE:	Filter mask for protection against gases and particles.		
Characteristics:	«CE» marking, category III. The mask must have a wide field of vision and an anatomically designed form in order to be sealed and watertight.		
CEN standards:	EN 136, EN 140, EN 405		
Maintenance:	Should not be stored in places exposed to high temperatures and damp environments before use. Special attention should be paid to the state of the inhalation and exhalation valves in the face adaptor.		
Observations:	Read carefully the manufacturer's instructions regarding the equipment's use and maintenance. Attach the necessary filters to the equipment according to the specific nature of the risk (Particles and aerosols: P1-P2-P3, Gases and vapours: A-B-E-K-AX), changing them as advised by the manufacturer.		
Filter Type needed:	A2		
Hand protection:			
PPE:	Non-disposable protective gloves against chemicals.		
Characteristics:	«CE» marking, category III. Check the list of chemicals for which the glove has been tested.		
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420		
Maintenance:	A schedule for the periodical replacement of gloves should be established in order to guarantee their replacement before pollutants permeate them. The use of contaminated gloves could be more dangerous than not using gloves, since the pollutant can gradually accumulate in the glove's material.		
Observations:	They are to be replaced whenever tears, cracks or deformations are observed or when exterior dirt could reduce their strength.		
Material:	PVC (polyvinyl chloride)	Breakthrough time (min.): > 480	Material thickness (mm): 0,35
Eye protection:			
PPE:	Protective goggles with built-in frame.		
Characteristics:	«CE» marking, category II. Eye protector with built-in frame for protection against splashing liquid, dust, smoke, fog and vapour.		
CEN standards:	EN 165, EN 166, EN 167, EN 168		
Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions.		
Observations:	Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.		
Skin protection:			
PPE:	Chemical protective clothing		
Characteristics:	«CE» marking, category III. Clothing should fit properly. The level of protection must be set according to a test parameter called BT (Breakthrough Time), which indicates how long it takes for the chemical to pass through the material.		
CEN standards:	EN 464, EN 340, EN 943-1, EN 943-2, EN ISO 6529, EN ISO 6530, EN 13034		
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.		
Observations:	The protective clothing's design should facilitate correct positioning, staying in place without moving for the period of use expected, bearing in mind environmental factors as well as any movement or position the user might adopt while carrying out the activity.		
PPE:	Anti-static safety footwear against chemicals.		
Characteristics:	«CE» marking, category III. Check the list of chemicals against which the footwear is resistant.		
CEN standards:	EN ISO 13287, EN 13832-1, EN 13832-2, EN 13832-3, EN ISO 20344, EN ISO 20345		
Maintenance:	For correct maintenance of this kind of safety footwear, it is necessary to observe the instructions specified by the manufacturer. The footwear should be replaced as soon as any sign of damage is observed.		
Observations:	The footwear should be cleaned regularly and dried when damp, although it should not be placed too close to a source of heat in order to avoid any sharp changes in temperature.		

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance: Transparent liquid.

Colour: Light yellow

Odour: Characteristic of solvent. Aromatic

Odour threshold: N.A./N.A.

pH: 5.5 - 7.5 (1%)

Melting point: N.A./N.A.

Boiling Point: N.A./N.A.

Flash point: 59 °C

Evaporation rate: N.A./N.A.

Inflammability (solid, gas): Flammable

Lower Explosive Limit: N.A./N.A.

Upper Explosive Limit: N.A./N.A.

Vapour pressure: N.A./N.A.

Vapour density: N.A./N.A.

Relative density: 0.945 - 0.965 g/cm³

Solubility: N.A./N.A.

Liposolubility: N.A./N.A.

Hydrosolubility: Emulsifiable not soluble. Insoluble in water, although the preparation forms homogeneous, stable emulsions.

Partition coefficient (n-octanol/water): N.A./N.A.

Auto-ignition temperature: Not auto-flammable °C

Decomposition temperature: N.A./N.A.

Viscosity: N.A./N.A.

Explosive properties: Not explosive

Oxidizing properties: Not oxidizing

N.A./N.A. = Not Available/Not Applicable due to the nature of the product

9.2 Other information.

Pour point: N.A./N.A.

Blink: N.A./N.A.

Kinematic viscosity: N.A./N.A.

N.A./N.A. = Not Available/Not Applicable due to the nature of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

If the storage conditions are satisfied, does not produce dangerous reactions.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions.

Flammable liquid and vapour.

10.4 Conditions to avoid.

Avoid the following conditions:

- High temperature.
- Static discharge.
- Contact with incompatible materials.
- Avoid temperatures near or above the flash point. Do not heat closed containers. Avoid direct sunlight and heat, as these may cause a risk of fire.

10.5 Incompatible materials.

Avoid the following materials:

- Explosives materials.
- Toxic materials.
- Oxidizing materials.

10.6 Hazardous decomposition products.

In case of fire, dangerous decomposition products can be generated, such as carbon monoxide and dioxide and nitrogen fumes and oxides.

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SECTION 11: TOXICOLOGICAL INFORMATION.

IRRITANT PREPARATION. The inhalation of spray mist or suspended particulates can irritate the respiratory tract. It can also cause serious respiratory difficulties, central nervous system disorders, and in extreme cases, unconsciousness.

11.1 Information on toxicological effects.

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Toxicological information about the substances present in the composition.

Name	Acute toxicity			
	Type	Test	Kind	Value
2-methylpropan-1-ol,iso-butanol CAS No: 78-83-1 EC No: 201-148-0	Oral	LD50	Rat	2830 mg/kg bw [1] [1] Christopher, S.M. November 30, 1993. "Isobutanol: Acute toxicity and irritancy testing using the rat (peroral and inhalation toxicity) and the rabbit (cutaneous and ocular tests)". Bushy Run Research Center, Union Carbide Corp. Lab. Proj. ID 92U1166
	Dermal	LD50	Rabbit	4240 mg/kg bw [1] [1] Smyth H.F. Jr. et al.: AMA Arch. Ind. Hyg. Occup. Med., 10, 61-68, (1954) as cited in IUCLID.
	Inhalation			

a) acute toxicity;

Name	Acute toxicity			
	Type	Test	Kind	Value
APACHE	Oral	LD50	Rat	500>LD50>2000 mg/kg bw
	Dermal	LD50	Rabbit	> 2000 mg/kg bw
	Inhalation	LC50	Rat	> 5.4 mg/L (6 h)

Product classified:

Acute toxicity (Oral), Category 4: Harmful if swallowed.

b) skin corrosion/irritation;

Based on available data, the classification criteria are not met.

c) serious eye damage/irritation;

Product classified:

Serious eye damage, Category 1: Causes serious eye damage.

d) respiratory or skin sensitisation;

Not conclusive data for classification.

e) germ cell mutagenicity;

Not conclusive data for classification.

f) carcinogenicity;

Not conclusive data for classification.

g) reproductive toxicity;

Based on available data, the classification criteria are not met.

h) STOT-single exposure;

Product classified:

Specific target organ toxicity following a single exposure, Category 3:

i) STOT-repeated exposure;

Product classified:

Specific target organ toxicity following a repeated exposure, Category 2: May cause damage to organs through prolonged or repeated exposure.

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j) aspiration hazard;

Product classified:

Aspiration toxicity, Category 1: May be fatal if swallowed and enters airways.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

Name	Ecotoxicity			
	Type	Test	Kind	Value
2-methylpropan-1-ol,iso-butanol CAS No: 78-83-1 EC No: 201-148-0	Fish	EC50	Pimephales promelas	1430 mg/L (96 h h) [1]
		[1] Brooke, L.T. et al., 1984. Acute Toxicities of Organic Chemicals to Fathead Minnows (Pimephales promelas). Vol. I. Center for Lake Superior Environmental Studies. University of Wisconsin-Superior.		
	Aquatic invertebrates	EC50	Daphnia magna	1300 mg/L (48 h) [1]
			[1] Elnabarawy MT, Welter AN, Robideau RR. 1986. relative sensitivity of three daphnid species to selected organic and inorganic chemicals. Environ Toxicol Chem 5: 393-398.	
	Aquatic plants	EC90	Selenastrum capricornutum (Pseudokirchnerella subcapitata)	717 mg/L (96 h) [1]
			[1] Wong, D.C.L, P.B. Dorn, and J.P. Salanitro. 1998. Aquatic Toxicity of Four Oxy-Solvents. Equilon Enterprises, LLC Technical Information Record WTC-3520.	

Name	Ecotoxicity			
	Type	Test	Kind	Value
APACHE	Fish	LC50	Onconrhyinchus	0.2012 mg/L (96 h)
		NOEC	mykiss	0.0191 mg/L
		LC50	Danio rerio	0.034 mg/L (96 h)
		NOEC		0.02 mg/L
	Aquatic invertebrates	EC50	Daphnia magna	0.0566 mg/L (48 h)
	Aquatic plants	ErC50		66.8 mg/L (72 h)
		EyC50		41.7 mg/L (72 h)
		EbC50	Desmodesmus subspicatus	34.2 mg/L (72 h)
		LOEC		40.0 mg /L
NOEC			16.0 mg/L	

12.2 Persistence and degradability.

No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

Information about the bioaccumulation of the substances present.

Name	Bioaccumulation			
	Log Pow	BCF	NOECs	Level
2-methylpropan-1-ol,iso-butanol N. CAS: 78-83-1 EC No: 201-148-0	0,76	-	-	Very low

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12.4 Mobility in soil.

No information is available about the mobility in soil.
The product must not be allowed to go into sewers or waterways.
Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13 DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.
Follow the provisions of Directive 2008/98/EC regarding waste management.

Waste classification according to the European Waste Catalogue:

02 WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING

02 01 wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing

02 01 08 agrochemical waste containing hazardous substances

Waste classified as hazardous.

Method of treatment according to Directive 2008/98/EC:

Disposal

D10 Incineration on land

Containers completely emptied must not be released into the environment. Rinse vigorously three times each package you use, pour the wash water to spray tank. This package once-use empty its contents, is a toxic waste so the user is required to deliver at the point of receipt of the integrated management system or to the dealer where the product was purchased.

SECTION 14: TRANSPORT INFORMATION.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.

Land: Transport by road: ADR, Transport by rail: RID.

Transport documentation: Consignment note and written instructions

Sea: Transport by ship: IMDG.

Transport documentation: Bill of lading

Air: Transport by plane: ICAO/IATA.

Transport document: Airway bill.

14.1 UN number.

UN No: UN1993

14.2 UN proper shipping name.

Description:

ADR: UN 1993, FLAMMABLE LIQUID, N.O.S. (Abamectin, ISO-BUTANOL), 3, III, (D/E)

IMDG: UN 1993, FLAMMABLE LIQUID, N.O.S. (Abamectin, ISO-BUTANOL), 3, III, MARINE POLLUTANT

ICAO: UN 1993, FLAMMABLE LIQUID, N.O.S. (Abamectin, ISO-BUTANOL), 3, III

14.3 Transport hazard class(es).

Class(es): 3

14.4 Packing group.

Packing group: III

14.5 Environmental hazards.

Marine pollutant: Yes

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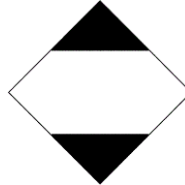


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14.6 Special precautions for user.

ADR LQ: 5 L
IMDG LQ: 5 L
ICAO LQ: 10 L



Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR.
Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-E,S-E
Proceed in accordance with point 6.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.

The product is not transported in bulk.

Note: ADR Limited Quantities Exemption: Combined packages with a total weight not greater than 30 kg are exempt provided that each individual package do not exceed 5 liter.

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): H2

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

Cause of revision and modifications with respect to the previous version: Initial.

Complete text of the H phrases that appear in section 3:

H226	Flammable liquid and vapour.
H300	Fatal if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.(sistemanervioso)
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

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SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

APACHE

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Classification codes:

Acute Tox. 1 : Acute toxicity (Inhalation), Category 1
Acute Tox. 2 : Acute toxicity (Oral), Category 2
Acute Tox. 4 : Acute toxicity (Oral), Category 4
Aquatic Acute 1 : Acute toxicity to the aquatic environment, Category 1
Aquatic Chronic 1 : Chronic effect to the aquatic environment, Category 1
Aquatic Chronic 2 : Chronic effect to the aquatic environment, Category 2
Aquatic Chronic 4 : Chronic effect to the aquatic environment, Category 4
Asp. Tox. 1 : Aspiration toxicity, Category 1
Eye Dam. 1 : Serious eye damage, Category 1
Flam. Liq. 3 : Flammable liquid, Category 3
Repr. 2 : Reproductive toxicant, Category 2
STOT RE 1 : Specific target organ toxicity following a repeated exposure, Category 1
STOT RE 2 : Specific target organ toxicity following a repeated exposure, Category 2
STOT SE 3 : Specific target organ toxicity following a single exposure, Category 3
Skin Irrit. 2 : Skin irritant, Category 2

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
BCF: Bioconcentration factor.
CEN: European Committee for Standardization.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.
DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
EC50: Half maximal effective concentration.
PPE: Personal protection equipment.
IATA: International Air Transport Association.
ICAO: International Civil Aviation Organization.
IMDG: International Maritime Code for Dangerous Goods.
LC50: Lethal concentration, 50%.
LD50: Lethal dose, 50%.
Log Pow: Logarithm of the partition octanol-water.
NOEC: No observed effect concentration.
PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.

Key literature references and sources for data:

<http://eur-lex.europa.eu/homepage.html>

<http://echa.europa.eu/>

Regulation (EU) 2015/830.

Regulation (EC) No 1907/2006.

Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.

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