



SAFETY DATA SHEET

Abamectin 18 EW

Revision Date 02-Jul-2017

Version 1

Product No INS00020-E

Publish Date 02-Jul-2017

R-26535 9502271 MCW 8732

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Abamectin 18 EW

Pure substance/mixture Mixture

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

Recommended Use Insecticide
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address ADAMA Makhteshim Ltd
PO Box 60
Beer Sheva 8410001 Israel

For further information, please contact

Email address SDS@ADAMA.COM

Emergency Telephone

Emergency Telephone +972-03-6106666 Subscription no. 36789 (ADAMA Makhteshim Ltd.)

Section 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Acute toxicity - Oral Category 4 - (H302)
Specific target organ toxicity (repeated exposure) Category 2 - (H373)
Acute aquatic toxicity Category 1 - (H400)
Chronic aquatic toxicity Category 1 - (H410)

Label Elements

Hazard pictograms



Signal word

Warning

Hazard Statements

H302 - Harmful if swallowed
 H373 - May cause damage to organs through prolonged or repeated exposure
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements

P102 - Keep out of reach of children
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray
 P270 - Do not eat, drink or smoke when using this product
 P501 - Dispose of contents/ container to an approved waste disposal plant

Other Hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical Name	Weight-%	CAS No
Abamectin (combination of avermectin B1a and avermectin B1b) (ISO)	1.5-2.0	71751-41-2
Acetophenone	12-14	98-86-2
Methanol	0.1-0.3	67-56-1

Section 4: FIRST AID MEASURES

First aid measures

General advice

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!.

Inhalation

Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Ingestion

Do NOT induce vomiting. Rinse mouth. Drink plenty of water. If symptoms persist, call a physician.

Self-protection of the first aider

Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms

None known

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available.

Special hazards arising from the substance or mixture

No specific hazard known.

Advice for firefighters

In the event of fire, wear self-contained breathing apparatus
In the event of fire and/or explosion do not breathe fumes.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Use personal protective equipment as required.

For emergency responders

Use personal protection recommended in Section 8.

Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for cleaning up

Take up mechanically, placing in appropriate containers for disposal.

Reference to other sections

Other Information

See also section 8,13

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

General Hygiene Considerations

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

Specific end use(s)

Risk Management Methods (RMM)

The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

National occupational exposure limits

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Acetophenone 98-86-2				TWA: 10 ppm TWA: 50 mg/m ³	
Methanol 67-56-1	TWA: 200 ppm TWA: 260 mg/m ³ Skin	STEL: 250 ppm STEL: 333 mg/m ³ TWA: 200 ppm TWA: 266 mg/m ³ Skin	TWA: 200 ppm TWA: 260 mg/m ³ STEL: 1000 ppm STEL: 1300 mg/m ³	S* TWA: 200 ppm TWA: 266 mg/m ³	TWA: 200 ppm TWA: 270 mg/m ³ Ceiling / Peak: 800 ppm Ceiling / Peak: 1080 mg/m ³ Skin
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Acetophenone 98-86-2		TWA: 10 ppm		TWA: 5 ppm TWA: 25 mg/m ³	TWA: 10 ppm TWA: 49 mg/m ³
Methanol 67-56-1	TWA: 200 ppm TWA: 260 mg/m ³ Skin	STEL: 250 ppm TWA: 200 ppm	Skin TWA: 133 mg/m ³ TWA: 100 ppm	TWA: 200 ppm TWA: 270 mg/m ³ STEL: 250 ppm STEL: 330 mg/m ³ Skin	TWA: 200 ppm TWA: 260 mg/m ³ Skin
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Acetophenone 98-86-2			STEL: 100 mg/m ³ TWA: 50 mg/m ³		TWA: 10 ppm TWA: 49 mg/m ³
Methanol 67-56-1	Skin STEL 800 ppm STEL 1040 mg/m ³ TWA: 200 ppm TWA: 260 mg/m ³	Skin STEL: 800 ppm STEL: 1040 mg/m ³ TWA: 200 ppm TWA: 260 mg/m ³	STEL: 300 mg/m ³ TWA: 100 mg/m ³ Skin	TWA: 100 ppm TWA: 130 mg/m ³ Skin STEL: 150 ppm STEL: 162.5 mg/m ³	TWA: 200 ppm TWA: 260 mg/m ³ Skin

Exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

- Eye/face protection** Tight sealing safety goggles.
- Hand Protection** Gloves made of plastic or rubber.
- Body Protection** Suitable protective clothing.
- Respiratory protection** Use only with adequate ventilation.

General Hygiene Considerations When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Appearance			
Physical state	: Liquid		
Color	: opaque white		
Odor	: Organic		
Odor threshold	: No data available		
pH	: 6-8	CIPAC MT 75.3	aqueous solution 1 %
Melting point/freezing point °C	: No data available		
Boiling point/boiling range °C	: No data available		
Flash point °C	: > 95	EEC A.9	Not flammable
Evaporation rate	: Not Applicable		
Flammability (solid, gas)	: Not Applicable		
Upper/lower flammability or explosive limits	: No data available		
Vapor pressure kPa	: No data available		
Vapor density	: No data available		
Relative density	: 1.00-1.06	OECD 109	
Solubility(ies) mg/l	: No data available		
Partition Coefficient (n-octanol/water) Log Pow	:		See Section 12 for more information
Autoignition temperature °C	: 430	92/69/EEC A.15	
Decomposition temperature °C	: No data available		
Kinematic viscosity mm²/s 40 °C	: 119.9 - 667.4	OECD 114; CIPAC MT 192	
Explosive properties	: Not an explosive	92/69/EEC A.14	
Oxidizing properties	: Not oxidizing	EEC A.17	
Other Information			
Bulk density g/ml	:		
Surface tension mN/m	: 28.0	OECD 115; EEC A.5	

Section 10: STABILITY AND REACTIVITY

Reactivity

Not available.

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible Materials

No information available

Hazardous Decomposition Products

None under normal use conditions.

Section 11: TOXICOLOGY INFORMATION

Information on toxicological effects

Acute toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Oral LD50 mg/kg	: 1000	Rat	OECD 423	
Dermal LD50 mg/kg	: >2000	Rat	OECD 402	
Inhalation LC50 mg/l/4h	: >5.4	Rat	OECD 403	
Skin corrosion/irritation	: Non-irritating to the skin	Rabbit	OECD 404	
Serious eye damage/eye irritation	: Not irritating to eyes	Rabbit	OECD 405	
Respiratory/skin sensitization	: Not a skin sensitizer	Guinea pig	OECD 406	

Chronic toxicity

Germ cell mutagenicity

Chemical Name

Abamectin (combination of avermectin : Not classified
B1a and avermectin B1b) (ISO

Carcinogenicity

Chemical Name

Abamectin (combination of avermectin : Not classified
B1a and avermectin B1b) (ISO

Reproductive toxicity

Chemical Name

Abamectin (combination of avermectin : H361d - Suspected of damaging the unborn child
B1a and avermectin B1b) (ISO

STOT - single exposure

Chemical Name

Abamectin (combination of avermectin B1a : Not available
and avermectin B1b) (ISO

STOT - repeated exposure

Aspiration hazard

Chemical Name

Abamectin (combination of avermectin : Not available
B1a and avermectin B1b) (ISO

Section 12: ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Acute toxicity				
Fish 96-hour LC50 mg/l	: 0.154	Rainbow trout	OECD 203	semi-static
Crustacea 48-hour EC50 mg/l	: 0.038	Daphnia magna	OECD 202	
Algae 72-hour EC50 mg/l	: 41.7	D. Subspicatus	OECD 201	
Other plants EC50 mg/l	:		OECD 221	Not available

Terrestrial Toxicity

Birds Oral LD50 mg/kg

Chemical Name

Abamectin (combination of avermectin : <77
B1a and avermectin B1b) (ISO Mallard duck

Bees Oral LD50 µg/bee

Chemical Name

Abamectin (combination of avermectin : 0.0022
B1a and avermectin B1b) (ISO contact

Persistence and degradability

Abiotic Degradation	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
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Water DT50 days

Chemical Name

Abamectin (combination of avermectin : 2.4
B1a and avermectin B1b) (ISO)

Soil DT50 days

Chemical Name

Abamectin (combination of avermectin : 28.7
B1a and avermectin B1b) (ISO)

Biodegradation

Chemical Name

Abamectin (combination of avermectin : Not readily biodegradable
B1a and avermectin B1b) (ISO)

Bioaccumulative potential

Partition Coefficient (n-octanol/water) Partition Coefficient (n-octanol/water) Log Pow	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
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Chemical Name

Abamectin (combination of avermectin : 4.4
B1a and avermectin B1b) (ISO)

Bioconcentration factor (BCF)

Chemical Name

Abamectin (combination of avermectin : 69
B1a and avermectin B1b) (ISO)

Mobility in soil

Adsorption/Desorption	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
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Chemical Name

Abamectin (combination of avermectin : 5638
B1a and avermectin B1b) (ISO)

Koc

Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB

Other adverse effects

No information available.

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Improper disposal or reuse of this container may be dangerous and illegal.

Other Information

Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORTATION INFORMATION

IMDG/IMO

UN/ID No * 3082
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Abamectin)
Hazard Class 9
Packing Group III
Marine pollutant Yes
Special precautions for user

RID/ADR

UN/ID No * 3082
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Abamectin)
Hazard Class 9
Packing Group III
Environmental hazard Yes
Special precautions for user

ICAO/IATA

UN/ID No * 3082
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Abamectin)
Hazard Class 9
Packing Group III
Environmental hazard Yes
Special precautions for user
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not Applicable



* Note: UN3077 & UN3082 – These products may be transported as non-dangerous goods under the special provisions of IMDG Code 2.10.2.7; ADR SP375 and ICAO/IATA A197 when packed in single or inner packaging of up to 5L for liquids or 5 kg or less for solids.

Section 15: REGULATORY INFORMATION

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

Section 16: OTHER INFORMATION

Revision Note Changes made to the last version are labeled with this sign ***.

List of Acronyms

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CAS Number - Chemical Abstracts Service number
EC Number - EINECS and ELINCS Number
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods

LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
OECD - Organization for Economic Co-operation and Development
PBT - Persistent, Bioaccumulative and Toxic substance
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
STOT - Specific Target Organ Toxicity
vPvB - Very Persistent and Very Bioaccumulative

Disclaimer

The information provided in this Material 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.

End of Safety Data Sheet