



Nufarm S.A.
Edificio Intecons
Arias 3751– Piso 20
(C1430CRG) Capital Federal
Argentina
Tel.: (54 11) 3220-0000
www.nufarm.com.ar

MATERIAL SAFETY DATA SHEET ABAMECTINE 1,8 Nufarm

1 – Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: Abamectine 1,8 Nufarm

Company product code:

Chemical name: mixture of avermectine containing 80% of avermectine B1a: (5-0- desmethyl avermectine A1a) and 20% of veremectine B1b: (5-0- esmethyl-25-des(1- methylpropyl)-25-(1-methylethyl) avermectine A1a

1.2 Relevant identified uses of the substance or mixture and uses advised against :
Insecticide-acaricide.

1.3 Details of the supplier of the safety data sheet

REOPEN S.A.
Albert Schweitzer 2834, Ituzaingó, Buenos Aires.

1.4 Emergency telephone number

Emergency 24 hs: (54 11) 3220 0000

2 – Hazards identification

2.1 Classification of the substance or mixture.

Classification 67/548 CE or 1999/45 CE Classification	F, R10 – Xn – N, R50-53
Classification Ce 1272/2008 (CLP) Physical hazards	Flam. Liq – Category 3 – Warning
Health hazards	Acute tox. – Category 4 – Warning STOT RE – Category 2 – Warning
Environmental hazards	Aquatic acute – Category 1 – Warning Aquatic chronic – Category 1 - Warning

The mixture is classified as hazardous.

2.2 Labels elements

Labeling 67/548 CE or 1999/45 CE



R Phrases R10; R48/20; R50-53

Labeling CE 1272/2008 (CLP)

Hazard pictograms:



Signal word: Warning
 Hazards statements: H226, H332; H373, H400, H410

Prevention: P210, P233, P240, P241, P242, P243, P280, P261, P271, P260. P273.

Response: P303 + P361 + P353; P370 + P378; P304 + P340; P312; P314; P391.

2.3 Other hazards

No additional hazards are present.

Classification phrases are detailed in Section 16.

3 – COMPOSITION/INFORMATION ON INGREDIENTS

Components:

Name	% range	CAS N°	EC N°	Classification CE
Avermectine	1,8 - 2	RN [71751-41-2]	-	Repr. 2 – H361d; Acute Tox. 2 – H300; Acute Tox. 1 – H330; STOT RE 1 – H372 (Sistema nervioso); Aquatic Acute 1 - H400; Aquatic Chronic 1 – H410
Alcohols (Carbon 4)				Flam. Liq 3; H226

Classification phrases are detailed in Section 16.



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4 – FIRST AID MEASURES

4.1. Description of first aid measures

Inhaled: Remove person to fresh air and keep in rest in a comfortable position for breathing. Contact immediately a POISON CENTER or a physician.

Skin contact: Remove contaminated clothes. Wash with plenty of water for 15 minutes. Consult a doctor.

Eye contact: Flush with water for at least 5 minutes. Consult immediately a doctor.

Swallowed: Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention.

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

May cause itching, edema, headache, arthralgia and myalgia.

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

No data available.

5 – FIREFIGHTING MEASURES

Flammable.

5.1 Extinguishing media

Suitable: Use any extinguishing media. Mainly dry chemical dust. Use water spray in order to cool containers.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, toxic fumes.

5.3 Advice for firefighters

Keep containers cool with water spray. If it's necessary, use self contained breathing apparatus (SCBA) for fire-fighting.

6 – ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Wear mask, gloves, long sleeves personal clothing, boots and safety glasses. Proceed to evacuate the danger area and call trained personnel.

For emergency responders:

Use protective breathing device. Avoid to inhale vapours, fog or mist. Make ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to secure area. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.



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6.2. Environmental precautions

Avoid new releases or spillage if they can be riskless. Do not allow to enter the product to sewer or drains system. Release in the environment must be avoided. Inactivate product with calcium carbonate or sodium hydroxide, pick up with wooden powder, sweep and bury away from heat sources and waterways.

6.3. Methods and material for containment and cleaning up

The spillage must be contained and picked up in an appropriate container for disposal according to local regulations. Keep in suitable containers, closed for disposal.

6.4. Reference to other sections

If appropriate Section 13 shall be referred to.

7 – HANDLING AND STORAGE

7.1 Precautions for safe handling

Do not smoke or consume food and / or beverages in workplaces. Read the label carefully before handling. Wash hands after each use. Keep out ignition sources.

7.2 Conditions for safe storage

Store in cool, dry, well-ventilated area. Store in original packaging until use at room temperature. Away from children, untrained people, food and fodder.

7.3 Specific use

The product in these presentations is used in treatment of crops and plantations as insecticide-acaricide. Special care should be taken when you have direct contact with the product, especially in the use of aerosol or mist form.

8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

There is no national control limits. Exposure should be evaluated according to applicable local regulations. Flammability: 3rd category. Toxicological classification: Class II. Dangerous

8.2 Exposure Controls

Eye Protection: Wear safety glasses to protect against possible projections in handling.

Respiratory protection: Use respiratory protective Toxic product for use in normal conditions, with protective organic liquids and gases.

Hand Protection: The use of neoprene gloves, PVC.

Skin protection and body protection: Wear work clothes with long sleeves and head cover also.

Hygiene measures: Do not smoke, drink or eat in areas of handling and / or storage.



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9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid. Emulsion concentrate.
Color:	Yellow translucent
Odour:	characteristic
Boiling point:	> 50 ° C.
Flash point:	24 ° C at 760 mm Hg (Closed Cup).
Vapor pressure:	1.5 x 10 ⁻⁹ mm Hg (Torr).
Solubility in water at 20 °:	<1 g / liter
Density:	0.833 g/cm ³ (20 ° C)
Decomposition temperature:	> 153 ° C
Viscosity:	Not determined

10 – STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

The product is stable in normal conditions of pressure and temperature. Recommended for use within two years.

10.3. Possibility of hazardous reactions

Not applicable. Not polymerize.

10.4. Conditions to avoid

Exposure to sources of ignition, high temperature, static discharge. Spills into waterways and sewer.

10.5. Incompatible materials

Do not store or mix with oxidizing (highly oxidizing products).

10.6. Hazardous decompositions products

No data available.

11 – TOXICOLOGICAL INFORMATION

a) acute toxicity:

Oral DL50: 3129 mg / kg.

Dermal DL50:> 4000 mg / kg

Inhalation CL50:> 2 mg / l

b) irritation: Not irritant.

c) corrosivity: No data available

d) sensitisation: No sensitizing

e) Repeated dose toxicity: May cause damage to organs nervous systems through prolonged or repeated exposure

f) Carcinogenicity: No data available.



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- g) Mutagenicity:** No data available
- h) Toxicity for reproduction:** no data available.

Possible routes of exposure

The main route of exposure is inhalation as fog or spray.

12 – ECOLOGICAL INFORMATION

Toxicity:

Acute effects on fish: Rainbow trout LC50: 0.2 mg / l
Toxicity to birds: Quail:> 2000 mg / kg.

Persistence and Degradability

Persistence in Soil: does not accumulate because it breaks down in the soil by the action of microorganisms.

Bioaccumulative potential

No experimental data are available.

Mobility in soil

No experimental data are available for mixing mobility.

Results of PBT and vPvB

No experimental data are available.

13 – DISPOSAL CONSIDERATIONS

Unused product and containers (packaging, containers, etc.) which have contained the product must be disposed according to local disposal regulations. Be neutralized with lime or caustic soda. For the final destruction is needed double ovens constant temperature > 1000 ° C and scrubber filters.

14 – TRANSPORT INFORMATION

Sea transport IMDG Code:

Proper Shipping Name:	PESTICIDE, LIQUID, TOXIC, FLAMMABLE, NOS (avermectin, alcohols (C-4))
UN Number:	UN 2903
Primary Risk:	Class 6.1
Subsidiary Risk:	Class 3
Packing group:	III
Marine Pollutant:	Yes
FEm:	F-E, S-D



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Air transport ICAO-TI, IATA-DGR:

Proper Shipping Name: PESTICIDE, LIQUID, TOXIC, FLAMMABLE, NOS (avermectin, alcohols (C-4))
UN Number: UN 2903
Primary Risk: Class 6.1
Subsidiary Risk: Class 3
Packing group: III

Mercosur Road Transport

Proper Shipping Name: PESTICIDES LIQUID, TOXIC, FLAMMABLE, NOS (avermectin, alcohols (C-4))
UN Number: UN 2903
Primary Risk: Class 6.1
Subsidiary Risk: Class 3
Packing group: III

Road Transport ADR:

Proper Shipping Name: PESTICIDES LIQUID, TOXIC, FLAMMABLE, NOS (avermectin, alcohols (C-4))
UN Number: UN 2903
Primary Risk: Class 6.1
Subsidiary Risk: Class 3
Packing group: III
Classification code: TF2
Tunnel restriction code: 2 (D/E)

15 – REGULATORY INFORMATION

The product is regulated by SENASA under number 34,794. We recommend that you take precautions and safety measures corresponding to the related components.

16 – OTHER INFORMATION

Version: 04

October 2013 – Revision classification.

References and acronyms.

MERCOSUR = General Regulations for transporting dangerous goods.
Code IMDG = International Maritime Dangerous Goods.
ICAO-TI = Civil Aviation Organization International - Technical Instructions.
IATA-DGR = International Air Transport Association - Dangerous Goods Regulations.
SENASA = National Health Service and Food Quality
F: highly flammable
Xn: Harmful substances or preparations
N: Substances or preparations that are dangerous for the environment
Acute Tox. 3 = Acute Toxicity Category 3 (CLP)



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Aquatic Acute 1 = Aquatic Toxicity Category 1 (CLP)
Chronic 1 = Aquatic Chronic Toxicity Category 1 (CLP)
Flam. Liq 3 = Flammable Liquid Category 3 (CLP)
R10: Flammable
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation
R50-53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
H226: Flammable liquid and vapour.
H332: Harmful if inhaled.
H373: May cause damage to organs nervous systems through prolonged or repeated exposure
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
P210: Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P271: Use only outdoors or in a well-ventilated area.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P273: Avoid release to the environment.
P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P370 + P378: In case of fire: Use chemical powder for extinction.
P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P314: Get medical advice/attention if you feel unwell.
P391: Collect spillage.
Repr.: Reproductive toxicity
H361d. Suspected of damaging the unborn child.
H300: Fatal if swallowed.
H330: Fatal if inhaled.
H372: Causes damage to organs nervous systems through prolonged or repeated exposure.

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