

# SAFETY DATA SHEET

according to the Globally Harmonized System



## Fluazuron / Abamectin Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 28.09.2024
9.0	24.03.2025	803735-00027	Date of first issue: 12.07.2016

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Fluazuron / Abamectin Formulation

#### Manufacturer or supplier's details

Company : MSD

Address : Briahnager - Off Pune Nagar Road  
Wagholi - Pune - India 412 207

Telephone : +1-908-740-4000

Emergency telephone number : +1-908-423-6000

E-mail address : EHSDATASTEWARD@msd.com

#### Recommended use of the chemical and restrictions on use

Recommended use : Veterinary product

Restrictions on use : Not applicable

### 2. HAZARDS IDENTIFICATION

#### Manufacture, Storage and Import of Hazardous Chemicals Rules 1989

##### Classification

Highly flammable liquids

##### GHS Classification

Flammable liquids : Category 3

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Skin corrosion/irritation : Category 2

Serious eye damage/eye irritation : Category 2A

Skin sensitisation : Category 1

Germ cell mutagenicity : Category 2

Reproductive toxicity : Category 1B

Specific target organ toxicity - single exposure : Category 3

Specific target organ toxicity - : Category 2 (Central nervous system)

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repeated exposure

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 1

### GHS label elements

Hazard pictograms	:	   
Signal word	:	Danger
Hazard statements	:	H226 Flammable liquid and vapour. H302 + H332 Harmful if swallowed or if inhaled. H315 + H319 Causes skin irritation and serious eye irritation. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H341 Suspected of causing genetic defects. H360D May damage the unborn child. H373 May cause damage to organs (Central nervous system) through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	:	<b>Prevention:</b> P203 Obtain, read and follow all safety instructions before use. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 Do not breathe mist or vapours. P264+P265 Wash hands thoroughly after handling. Do not touch eyes. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or with adequate ventilation. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  <b>Response:</b> P301 + P317 + P330 IF SWALLOWED: Get medical help. Rinse mouth. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water. P304 + P340 + P317 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P318 IF exposed or concerned, get medical advice.

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P333 + P317 If skin irritation or rash occurs: Get medical help.  
P337 + P317 If eye irritation persists: Get medical help.  
P362 + P364 Take off contaminated clothing and wash it before reuse.  
P391 Collect spillage.

### Storage:

P405 Store locked up.

### Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

### Other hazards which do not result in classification

Vapours may form explosive mixture with air.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Components

Chemical name	CAS-No.	Concentration (% w/w)
Propan-2-ol	67-63-0	>= 30 - < 50
N-Methyl-2-pyrrolidone	872-50-4	>= 30 - < 50
Poly[oxy(methyl-1,2-ethanediyl)], α-(1-oxotetradecyl)-ω-(phenylmethoxy)-	642443-86-5	>= 20 - < 30
Fluazuron	86811-58-7	>= 2.5 - < 5
abamectin (combination of avermectin B1a and avermectin B1b) (ISO)	71751-41-2	>= 1 - < 2.5
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate	2386-87-0	>= 1 - < 2.5
2,6-Di-tert-butyl-p-cresol	128-37-0	>= 0.1 - < 0.25

## 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air.  
If not breathing, give artificial respiration.  
If breathing is difficult, give oxygen.  
Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.  
Get medical attention.  
Wash clothing before reuse.  
Thoroughly clean shoes before reuse.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.  
If easy to do, remove contact lens, if worn.  
Get medical attention.

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If swallowed	: If swallowed, DO NOT induce vomiting. Get medical attention. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	: Harmful if swallowed or if inhaled. Causes skin irritation and serious eye irritation. May cause an allergic skin reaction. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing genetic defects. May damage the unborn child. May cause damage to organs through prolonged or repeated exposure.
Protection of first-aiders	: First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).
Notes to physician	: Treat symptomatically and supportively.

### 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Water spray Alcohol-resistant foam Carbon dioxide (CO <sub>2</sub> ) Dry chemical
Unsuitable extinguishing media	: High volume water jet
Specific hazards during fire-fighting	: Do not use a solid water stream as it may scatter and spread fire. Flash back possible over considerable distance. Vapours may form explosive mixtures with air. Exposure to combustion products may be a hazard to health.
Hazardous combustion products	: Carbon oxides Nitrogen oxides (NO <sub>x</sub> ) Chlorine compounds Fluorine compounds
Specific extinguishing methods	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.
Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Remove all sources of ignition. Use personal protective equipment. Follow safe handling advice (see section 7) and personal pro-
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protective equipment recommendations (see section 8).

Environmental precautions : Avoid release to the environment.  
Prevent further leakage or spillage if safe to do so.  
Prevent spreading over a wide area (e.g. by containment or oil barriers).  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up : Non-sparking tools should be used.  
Soak up with inert absorbent material.  
Suppress (knock down) gases/vapours/mists with a water spray jet.  
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.  
Clean up remaining materials from spill with suitable absorbent.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.  
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

## 7. HANDLING AND STORAGE

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust ventilation.  
Use explosion-proof electrical, ventilating and lighting equipment.

Advice on safe handling : Do not get on skin or clothing.  
Do not breathe mist or vapours.  
Do not swallow.  
Do not get in eyes.  
Wash skin thoroughly after handling.  
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment  
Non-sparking tools should be used.  
Keep container tightly closed.  
Already sensitised individuals, and those susceptible to asthma, allergies, chronic or recurrent respiratory disease, should consult their physician regarding working with respiratory irritants or sensitisers.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Take precautionary measures against static discharges.  
Do not eat, drink or smoke when using this product.  
Take care to prevent spills, waste and minimize release to the

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environment.

Conditions for safe storage : Keep in properly labelled containers.  
Store locked up.  
Keep tightly closed.  
Keep in a cool, well-ventilated place.  
Store in accordance with the particular national regulations.  
Keep away from heat and sources of ignition.

Materials to avoid : Do not store with the following product types:  
Self-reactive substances and mixtures  
Organic peroxides  
Oxidizing agents  
Flammable gases  
Pyrophoric liquids  
Pyrophoric solids  
Self-heating substances and mixtures  
Poisonous gases  
Explosives

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
Fluazuron	86811-58-7	TWA	60 µg/m <sup>3</sup> (OEB 3)	Internal
		Wipe limit	600 µg/ 100cm <sup>2</sup>	Internal
abamectin (combination of avermectin B1a and avermectin B1b) (ISO)	71751-41-2	TWA	15 µg/m <sup>3</sup> (OEB 3)	Internal
		Wipe limit	150 µg/100 cm <sup>2</sup>	Internal
2,6-Di-tert-butyl-p-cresol	128-37-0	TWA (Inhalable fraction and vapor)	2 mg/m <sup>3</sup>	ACGIH

#### Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Propan-2-ol	67-63-0	Acetone	Urine	End of shift at end of work-week	40 mg/l	ACGIH BEI
N-Methyl-2-pyrrolidone	872-50-4	5-Hydroxy-N-methyl-2-pyrrolidone	Urine	End of shift (As soon as possible after exposure)	100 mg/l	ACGIH BEI

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II					ceases)		
<b>Engineering measures</b>		:	<p>Use appropriate engineering controls and manufacturing technologies to control airborne concentrations (e.g., drip-less quick connections).</p> <p>All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.</p> <p>Containment technologies suitable for controlling compounds are required to control at source and to prevent migration of the compound to uncontrolled areas (e.g., open-face containment devices).</p> <p>Minimize open handling.</p> <p>Use explosion-proof electrical, ventilating and lighting equipment.</p>				
<b>Personal protective equipment</b>							
Respiratory protection		:	If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.				
Filter type		:	Combined particulates and organic vapour type				
Hand protection							
Material		:	Chemical-resistant gloves				
Remarks		:	Consider double gloving. Take note that the product is flammable, which may impact the selection of hand protection.				
Eye protection		:	<p>Wear safety glasses with side shields or goggles.</p> <p>If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles.</p> <p>Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.</p>				
Skin and body protection		:	<p>Work uniform or laboratory coat.</p> <p>Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.</p> <p>Use appropriate degowning techniques to remove potentially contaminated clothing.</p>				
Hygiene measures		:	<p>If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.</p> <p>When using do not eat, drink or smoke.</p> <p>Contaminated work clothing should not be allowed out of the workplace.</p> <p>Wash contaminated clothing before re-use.</p> <p>The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.</p>				

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

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Colour	:	No data available
Odour	:	No data available
Odour Threshold	:	No data available
pH	:	No data available
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	No data available
Flash point	:	28 °C
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Flammability (liquids)	:	Not applicable
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	No data available
Solubility(ies) Water solubility	:	No data available
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.



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Molecular weight : No data available

Particle characteristics  
Particle size : Not applicable

### 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.  
Chemical stability : Stable under normal conditions.  
Possibility of hazardous reactions : Flammable liquid and vapour.  
Vapours may form explosive mixture with air.  
Can react with strong oxidizing agents.

Conditions to avoid : Heat, flames and sparks.  
Incompatible materials : Oxidizing agents  
Hazardous decomposition products : No hazardous decomposition products are known.

### 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
Skin contact  
Ingestion  
Eye contact

#### Acute toxicity

Harmful if swallowed or if inhaled.

#### Product:

Acute oral toxicity : Acute toxicity estimate: 1,822 mg/kg  
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: 2.06 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg  
Method: Calculation method

#### Components:

##### Propan-2-ol:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 25 mg/l  
Exposure time: 6 h  
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

##### N-Methyl-2-pyrrolidone:

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Acute oral toxicity	: LD50 (Rat): 4,150 mg/kg Method: OECD Test Guideline 401 Remarks: The test was conducted equivalent or similar to guideline
Acute inhalation toxicity	: LC50 (Rat): > 5.1 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Remarks: The test was conducted according to guideline
Acute dermal toxicity	: LD50 (Rat): > 5,000 mg/kg Method: OECD Test Guideline 402 Remarks: The test was conducted equivalent or similar to guideline

### **Poly[oxy(methyl-1,2-ethanediyl)], α-(1-oxotetradecyl)-ω-(phenylmethoxy)-:**

Acute oral toxicity	: LD50 (Rat): > 16,000 mg/kg
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### **Fluazuron:**

Acute oral toxicity	: LD50 (Rat): > 5,000 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	: LC50 (Rat): > 6.0 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403
Acute dermal toxicity	: LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 402

### **abamectin (combination of avermectin B1a and avermectin B1b) (ISO):**

Acute oral toxicity	: LD50 (Rat): 24 mg/kg  LD50 (Mouse): 10 mg/kg  LDLo (Monkey): 24 mg/kg Symptoms: Dilatation of the pupil
Acute inhalation toxicity	: LC50 (Rat): 0.023 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	: LD50 (Rat): 330 mg/kg  LD50 (Rabbit): 2,000 mg/kg

### **7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:**

Acute oral toxicity	: LD50 (Rat, male): > 2,959 - 5,000 mg/kg Method: OECD Test Guideline 401
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Acute inhalation toxicity : LC50 (Rat):  $\geq 5.19$  mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 436  
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat):  $> 2,000$  mg/kg  
Method: OECD Test Guideline 402  
Assessment: The substance or mixture has no acute dermal toxicity

### 2,6-Di-tert-butyl-p-cresol:

Acute oral toxicity : LD50 (Rat):  $> 6,000$  mg/kg  
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat):  $> 2,000$  mg/kg  
Method: OECD Test Guideline 402  
Assessment: The substance or mixture has no acute dermal toxicity

### Skin corrosion/irritation

Causes skin irritation.

### Components:

#### Propan-2-ol:

Species : Rabbit  
Result : No skin irritation

#### N-Methyl-2-pyrrolidone:

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : Skin irritation  
Remarks : The test was conducted equivalent or similar to guideline

#### Poly[oxy(methyl-1,2-ethanediyl)], $\alpha$ -(1-oxotetradecyl)- $\omega$ -(phenylmethoxy)-:

Species : Rabbit  
Result : Mild skin irritation

#### Fluazuron:

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : No skin irritation

#### abamectin (combination of avermectin B1a and avermectin B1b) (ISO):

Species : Rabbit  
Result : No skin irritation

#### 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:

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Species	: Rabbit
Method	: OECD Test Guideline 404
Result	: No skin irritation

### 2,6-Di-tert-butyl-p-cresol:

Species	: Rabbit
Method	: OECD Test Guideline 404
Result	: No skin irritation
Remarks	: Based on data from similar materials

### Serious eye damage/eye irritation

Causes serious eye irritation.

### Components:

#### Propan-2-ol:

Species	: Rabbit
Result	: Irritation to eyes, reversing within 21 days

#### N-Methyl-2-pyrrolidone:

Species	: Rabbit
Method	: OECD Test Guideline 405
Result	: Irritation to eyes, reversing within 21 days
Remarks	: The test was conducted equivalent or similar to guideline

#### Poly[oxy(methyl-1,2-ethanediyl)], $\alpha$ -(1-oxotetradecyl)- $\omega$ -(phenylmethoxy)-:

Species	: Rabbit
Result	: No eye irritation

#### Fluazuron:

Species	: Rabbit
Method	: OECD Test Guideline 405
Result	: Mild eye irritation

#### abamectin (combination of avermectin B1a and avermectin B1b) (ISO):

Species	: Rabbit
Result	: Mild eye irritation

#### 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:

Species	: Rabbit
Method	: OECD Test Guideline 405
Result	: No eye irritation

#### 2,6-Di-tert-butyl-p-cresol:

Species	: Rabbit
Method	: OECD Test Guideline 405
Result	: No eye irritation
Remarks	: Based on data from similar materials

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### Respiratory or skin sensitisation

#### Skin sensitisation

May cause an allergic skin reaction.

#### Respiratory sensitisation

Not classified based on available information.

#### Components:

##### Propan-2-ol:

Test Type	: Buehler Test
Exposure routes	: Skin contact
Species	: Guinea pig
Method	: OECD Test Guideline 406
Result	: negative

##### N-Methyl-2-pyrrolidone:

Test Type	: Local lymph node assay (LLNA)
Exposure routes	: Skin contact
Species	: Mouse
Method	: OECD Test Guideline 429
Result	: negative
Remarks	: Based on data from similar materials

##### Poly[oxy(methyl-1,2-ethanediyl)], $\alpha$ -(1-oxotetradecyl)- $\omega$ -(phenylmethoxy)-:

Test Type	: Human repeat insult patch test (HRIPT)
Exposure routes	: Skin contact
Result	: negative

##### Fluazuron:

Exposure routes	: Skin contact
Species	: Guinea pig
Result	: negative

##### abamectin (combination of avermectin B1a and avermectin B1b) (ISO):

Test Type	: Maximisation Test
Exposure routes	: Skin contact
Result	: Not a skin sensitizer.

##### 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:

Test Type	: Maximisation Test
Exposure routes	: Skin contact
Species	: Guinea pig
Result	: positive

Assessment	: Probability or evidence of skin sensitisation in humans
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##### 2,6-Di-tert-butyl-p-cresol:

Test Type	: Human repeat insult patch test (HRIPT)
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Exposure routes	: Skin contact
Species	: Humans
Result	: negative

### Germ cell mutagenicity

Suspected of causing genetic defects.

### Components:

#### Propan-2-ol:

Genotoxicity in vitro	: Test Type: Bacterial reverse mutation assay (AMES) Result: negative
	Test Type: In vitro mammalian cell gene mutation test Result: negative
Genotoxicity in vivo	: Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Intraperitoneal injection Result: negative

#### N-Methyl-2-pyrrolidone:

Genotoxicity in vitro	: Test Type: Bacterial reverse mutation assay (AMES) Method: OECD Test Guideline 471 Result: negative Remarks: The test was conducted according to guideline
	Test Type: In vitro mammalian cell gene mutation test Method: OECD Test Guideline 476 Result: negative Remarks: The test was conducted according to guideline
	Test Type: DNA damage and repair, unscheduled DNA synthesis in mammalian cells (in vitro) Method: OECD Test Guideline 482 Result: negative Remarks: The test was conducted equivalent or similar to guideline
Genotoxicity in vivo	: Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Ingestion Method: OECD Test Guideline 474 Result: negative Remarks: The test was conducted according to guideline

#### Poly[oxy(methyl-1,2-ethanediyl)], $\alpha$ -(1-oxotetradecyl)- $\omega$ -(phenylmethoxy)-:

Genotoxicity in vitro	: Test Type: Bacterial reverse mutation assay (AMES) Result: negative
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### Fluazuron:

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Result: negative
		Test Type: DNA Repair Result: negative
		Test Type: In vitro mammalian cell gene mutation test Result: negative
Genotoxicity in vivo	:	Test Type: Cytogenetic assay Species: Hamster Result: equivocal

### abamectin (combination of avermectin B1a and avermectin B1b) (ISO):

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Result: negative
		Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster lung cells Result: negative
		Test Type: Alkaline elution assay Result: negative
Genotoxicity in vivo	:	Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis) Species: Mouse Application Route: Intraperitoneal injection Result: negative

### 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Method: OECD Test Guideline 471 Result: positive
		Test Type: In vitro mammalian cell gene mutation test Result: positive
		Test Type: In vitro sister chromatid exchange assay in mammalian cells Result: positive
		Test Type: DNA damage and repair, unscheduled DNA synthesis in mammalian cells (in vitro) Result: positive
Genotoxicity in vivo	:	Test Type: Unscheduled DNA synthesis (UDS) test with mammalian liver cells in vivo Species: Rat Application Route: Ingestion Method: OECD Test Guideline 486 Result: negative

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	Test Type: Micronucleus test
	Species: Mouse
	Application Route: Intraperitoneal injection
	Result: negative
	Test Type: Transgenic rodent somatic cell gene mutation assay
	Species: Mouse
	Application Route: Ingestion
	Method: OECD Test Guideline 488
	Result: positive
Germ cell mutagenicity - Assessment	: Positive result(s) from in vivo mammalian somatic cell mutagenicity tests.

### 2,6-Di-tert-butyl-p-cresol:

Genotoxicity in vitro	: Test Type: Bacterial reverse mutation assay (AMES)
	Result: negative
	Test Type: In vitro mammalian cell gene mutation test
	Result: negative
	Test Type: Chromosome aberration test in vitro
	Result: negative
Genotoxicity in vivo	: Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)
	Species: Rat
	Application Route: Ingestion
	Result: negative

### Carcinogenicity

Not classified based on available information.

### Components:

#### Propan-2-ol:

Species	: Rat
Application Route	: inhalation (vapour)
Exposure time	: 104 weeks
Method	: OECD Test Guideline 451
Result	: negative

#### N-Methyl-2-pyrrolidone:

Species	: Rat
Application Route	: Ingestion
Exposure time	: 2 Years
Method	: OECD Test Guideline 451
Result	: negative
Remarks	: The test was conducted according to guideline



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Species	: Rat
Application Route	: Inhalation
Exposure time	: 2 Years
Method	: OECD Test Guideline 453
Result	: negative
Remarks	: The test was conducted equivalent or similar to guideline

### Fluazuron:

Species	: Rat
Application Route	: Ingestion
Exposure time	: 2 Years
Method	: OECD Test Guideline 453
Result	: negative

Species	: Mouse
Application Route	: Ingestion
Exposure time	: 2 Years
Result	: negative

### abamectin (combination of avermectin B1a and avermectin B1b) (ISO):

Species	: Rat
Application Route	: Oral
Exposure time	: 105 weeks
Result	: negative

Species	: Mouse
Application Route	: Oral
Exposure time	: 93 weeks
Result	: negative

### 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:

Species	: Mouse
Application Route	: Skin contact
Exposure time	: 29 Months
Result	: negative

### 2,6-Di-tert-butyl-p-cresol:

Species	: Rat
Application Route	: Ingestion
Exposure time	: 22 Months
Result	: negative

### Reproductive toxicity

May damage the unborn child.

### Components:

#### Propan-2-ol:

Effects on fertility	: Test Type: Two-generation reproduction toxicity study
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	Species: Rat Application Route: Ingestion Result: negative
Effects on foetal development	: Test Type: Embryo-foetal development Species: Rat Application Route: Ingestion Result: negative
<b>N-Methyl-2-pyrrolidone:</b>	
Effects on fertility	: Test Type: Two-generation reproduction toxicity study Species: Rat Application Route: Ingestion Method: OECD Test Guideline 416 Result: negative Remarks: The test was conducted according to guideline
Effects on foetal development	: Test Type: Embryo-foetal development Species: Rat Application Route: Ingestion Method: OECD Test Guideline 414 Result: positive Remarks: The test was conducted according to guideline
	Test Type: Fertility/early embryonic development Species: Rat Application Route: inhalation (vapour) Method: OECD Test Guideline 414 Result: positive Remarks: The test was conducted equivalent or similar to guideline
	Test Type: Embryo-foetal development Species: Rabbit Application Route: Ingestion Method: OECD Test Guideline 414 Result: positive Remarks: The test was conducted equivalent or similar to guideline
Reproductive toxicity - Assessment	: Clear evidence of adverse effects on development, based on animal experiments.

### Fluazuron:

Effects on fertility	: Test Type: Two-generation reproduction toxicity study Species: Rat Application Route: Ingestion Result: negative
Effects on foetal development	: Test Type: Embryo-foetal development Species: Rat Application Route: Ingestion Result: negative

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Test Type: Embryo-foetal development  
Species: Rabbit  
Application Route: Ingestion  
Method: OECD Test Guideline 414  
Result: negative

### abamectin (combination of avermectin B1a and avermectin B1b) (ISO):

Effects on fertility	: Test Type: Fertility Species: Rat, male Application Route: Oral Result: Effects on fertility
	Test Type: Two-generation reproduction toxicity study Species: Rat Application Route: Oral Early Embryonic Development: NOAEL: 0.12 mg/kg body weight Result: Fetotoxicity
Effects on foetal development	: Test Type: Embryo-foetal development Species: Mouse Application Route: Oral General Toxicity Maternal: NOAEL: 0.05 mg/kg body weight Developmental Toxicity: NOAEL: 0.2 mg/kg body weight Result: Cleft palate Remarks: Adverse developmental effects were observed
	Test Type: Embryo-foetal development Species: Rabbit Application Route: Oral Developmental Toxicity: LOAEL: 2 mg/kg body weight Result: Cleft palate, Teratogenic effects, Reduced embryonic survival Remarks: Adverse developmental effects were observed
	Test Type: Development Species: Rat Application Route: Oral Developmental Toxicity: LOAEL: 1.6 mg/kg body weight Result: Teratogenic effects
Reproductive toxicity - Assessment	: Some evidence of adverse effects on sexual function and fertility, based on animal experiments., Some evidence of adverse effects on development, based on animal experiments.

### 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:

Effects on foetal development	: Test Type: Embryo-foetal development Species: Rat Application Route: Ingestion Method: OECD Test Guideline 414 Result: negative
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### 2,6-Di-tert-butyl-p-cresol:

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
Species: Rat  
Application Route: Ingestion  
Result: negative

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Rat  
Application Route: Ingestion  
Result: negative

### STOT - single exposure

May cause respiratory irritation.  
May cause drowsiness or dizziness.

### Components:

#### Propan-2-ol:

Assessment : May cause drowsiness or dizziness.

#### N-Methyl-2-pyrrolidone:

Assessment : May cause respiratory irritation.

### STOT - repeated exposure

May cause damage to organs (Central nervous system) through prolonged or repeated exposure.

### Components:

#### abamectin (combination of avermectin B1a and avermectin B1b) (ISO):

Exposure routes : Ingestion  
Target Organs : Central nervous system  
Assessment : Causes damage to organs through prolonged or repeated exposure.

#### 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:

Exposure routes : Ingestion  
Target Organs : nasal cavity  
Assessment : Shown to produce significant health effects in animals at concentrations of >10 to 100 mg/kg bw.

### 2,6-Di-tert-butyl-p-cresol:

Assessment : No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.

### Repeated dose toxicity

### Components:

#### Propan-2-ol:

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Species	: Rat
NOAEL	: 12.5 mg/l
Application Route	: inhalation (vapour)
Exposure time	: 104 Weeks

### N-Methyl-2-pyrrolidone:

Species	: Rat, male
NOAEL	: 169 mg/kg
LOAEL	: 433 mg/kg
Application Route	: Ingestion
Exposure time	: 90 Days
Method	: OECD Test Guideline 408
Remarks	: The test was conducted according to guideline

Species	: Rat
NOAEL	: 0.5 mg/l
LOAEL	: 1 mg/l
Application Route	: inhalation (dust/mist/fume)
Exposure time	: 96 Days
Method	: OECD Test Guideline 413
Remarks	: The test was conducted according to guideline

Species	: Rabbit, male
NOAEL	: 826 mg/kg
LOAEL	: 1,653 mg/kg
Application Route	: Skin contact
Exposure time	: 20 Days
Method	: OECD Test Guideline 410
Remarks	: The test was conducted equivalent or similar to guideline

### Fluazuron:

Species	: Rat
LOAEL	: 240 mg/kg
Application Route	: Ingestion
Exposure time	: 13 Weeks
Target Organs	: Liver, Thyroid, Pituitary gland

Species	: Rat
NOAEL	: 10 mg/kg
LOAEL	: 100 mg/kg
Application Route	: Skin contact
Exposure time	: 3 Weeks

Species	: Dog
NOAEL	: 7.5 mg/kg
LOAEL	: 110 mg/kg
Application Route	: Ingestion
Exposure time	: 52 Weeks
Target Organs	: Liver

### abamectin (combination of avermectin B1a and avermectin B1b) (ISO):

Species	: Rat
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NOAEL	: 1.5 mg/kg
Application Route	: Oral
Exposure time	: 24 Months
Target Organs	: Central nervous system
Symptoms	: Tremors, ataxia

Species	: Mouse
NOAEL	: 4.0 mg/kg
Application Route	: Oral
Exposure time	: 24 Months
Target Organs	: Central nervous system
Symptoms	: Tremors, ataxia

Species	: Dog
NOAEL	: 0.25 mg/kg
LOAEL	: 0.5 mg/kg
Application Route	: Oral
Exposure time	: 53 Weeks
Target Organs	: Central nervous system
Symptoms	: Tremors, weight loss
Remarks	: mortality observed

Species	: Monkey
NOAEL	: 1.0 mg/kg
Application Route	: Oral
Exposure time	: 14 Weeks
Target Organs	: Central nervous system

### 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:

Species	: Rat
NOAEL	: 5 mg/kg
LOAEL	: 50 mg/kg
Application Route	: Ingestion
Exposure time	: 90 Days
Method	: OECD Test Guideline 408

### 2,6-Di-tert-butyl-p-cresol:

Species	: Rat
NOAEL	: 25 mg/kg
Application Route	: Ingestion
Exposure time	: 22 Months

### Aspiration toxicity

Not classified based on available information.

### Experience with human exposure

#### Components:

#### **N-Methyl-2-pyrrolidone:**

Skin contact	: Symptoms: Skin irritation
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#### **abamectin (combination of avermectin B1a and avermectin B1b) (ISO):**

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Ingestion : Symptoms: May cause, Tremors, Diarrhoea, central nervous system effects, Salivation, tearing

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

##### **Propan-2-ol:**

Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): 9,640 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 24 h
Toxicity to microorganisms	: EC50 (Pseudomonas putida): > 1,050 mg/l Exposure time: 16 h

##### **N-Methyl-2-pyrrolidone:**

Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): > 500 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 1,000 mg/l Exposure time: 24 h Method: DIN 38412 Remarks: The test was conducted according to guideline
Toxicity to algae/aquatic plants	: ErC50 ( Desmodesmus subspicatus (green algae)): 600.5 mg/l Exposure time: 72 h  EC10 ( Desmodesmus subspicatus (green algae)): 92.6 mg/l Exposure time: 72 h
Toxicity to microorganisms	: EC50 (activated sludge): > 600 mg/l Exposure time: 30 min Method: ISO 8192 Remarks: The test was conducted according to guideline
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 12.5 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211 Remarks: The test was conducted according to guideline

##### **Poly[oxy(methyl-1,2-ethanediyl)], α-(1-oxotetradecyl)-ω-(phenylmethoxy)-:**

Toxicity to fish	: LC50: 540 mg/l Exposure time: 96 h Test substance: Water Accommodated Fraction
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Ceriodaphnia dubia (water flea)): 221 mg/l Exposure time: 48 h

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Test substance: Water Accommodated Fraction

Toxicity to algae/aquatic plants : NOEC ( *Selenastrum capricornutum* (fresh water algae)): 78 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

### Fluazuron:

Toxicity to fish : LC50 (*Cyprinus carpio* (Carp)): > 9.1 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia* sp. (water flea)): 0.0006 mg/l  
Exposure time: 48 h

Toxicity to algae/aquatic plants : NOEC ( *Raphidocelis subcapitata* (freshwater green alga)): 27.9 mg/l  
Exposure time: 72 h

M-Factor (Acute aquatic toxicity) : 1,000

M-Factor (Chronic aquatic toxicity) : 1,000

### abamectin (combination of avermectin B1a and avermectin B1b) (ISO):

Toxicity to fish : LC50 (*Oncorhynchus mykiss* (rainbow trout)): 3.2 µg/l  
Exposure time: 96 h

LC50 (*Lepomis macrochirus* (Bluegill sunfish)): 9.6 µg/l  
Exposure time: 96 h

LC50 (*Ictalurus punctatus* (channel catfish)): 24 µg/l  
Exposure time: 96 h

LC50 (*Cyprinus carpio* (Carp)): 42 µg/l  
Exposure time: 96 h

LC50 (*Cyprinodon variegatus* (sheepshead minnow)): 15 µg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Americamysis*): 0.022 µg/l  
Exposure time: 96 h

EC50 (*Daphnia magna* (Water flea)): 0.34 µg/l  
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 ( *Pseudokirchneriella subcapitata* (green algae)): 100 mg/l  
Exposure time: 72 h

M-Factor (Acute aquatic toxicity) : 10,000



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Toxicity to microorganisms	: EC50: > 1,000 mg/l Exposure time: 3 h Test Type: Respiration inhibition
Toxicity to fish (Chronic toxicity)	: NOEC: 0.52 µg/l Exposure time: 32 d Species: Pimephales promelas (fathead minnow)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 0.03 µg/l Exposure time: 21 d Species: Daphnia magna (Water flea)  NOEC: 0.0035 µg/l Exposure time: 28 d Species: Mysidopsis bahia (opossum shrimp)
M-Factor (Chronic aquatic toxicity)	: 10,000

### 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:

Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): 24 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 40 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	: ErC50 ( Raphidocelis subcapitata (freshwater green alga)): > 110 mg/l Exposure time: 72 h Method: OECD Test Guideline 201  NOEC ( Raphidocelis subcapitata (freshwater green alga)): 30 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to microorganisms	: EC10 (activated sludge): 409 mg/l Exposure time: 3 h Method: OECD Test Guideline 209

### 2,6-Di-tert-butyl-p-cresol:

Toxicity to fish	: LC50 (Danio rerio (zebra fish)): > 0.57 mg/l Exposure time: 96 h Method: Directive 67/548/EEC, Annex V, C.1.
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 0.48 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	: ErC50 ( Pseudokirchneriella subcapitata (green algae)): > 0.24 mg/l

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	Exposure time: 72 h
	Method: OECD Test Guideline 201
	NOEC ( Pseudokirchneriella subcapitata (green algae)): 0.24 mg/l
	Exposure time: 72 h
	Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	: 1
Toxicity to microorganisms	: EC50: > 10,000 mg/l
	Exposure time: 3 h
	Method: OECD Test Guideline 209
Toxicity to fish (Chronic toxicity)	: NOEC: 0.053 mg/l
	Exposure time: 30 d
	Species: Oryzias latipes (Japanese medaka)
	Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 0.316 mg/l
	Exposure time: 21 d
	Species: Daphnia magna (Water flea)
M-Factor (Chronic aquatic toxicity)	: 1

### Persistence and degradability

#### Components:

##### **Propan-2-ol:**

Biodegradability	: Result: rapidly degradable
BOD/COD	: BOD: 1,19 (BOD5)
	COD: 2,23
	BOD/COD: 53 %

##### **N-Methyl-2-pyrrolidone:**

Biodegradability	: Result: Readily biodegradable.
	Biodegradation: 73 %
	Exposure time: 28 d
	Method: OECD Test Guideline 301C
	Remarks: The test was conducted according to guideline

##### **abamectin (combination of avermectin B1a and avermectin B1b) (ISO):**

Stability in water	: Hydrolysis: 50 %(< 12 h)
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##### **7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:**

Biodegradability	: Result: Not readily biodegradable.
	Biodegradation: 71 %
	Exposure time: 28 d

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Method: OECD Test Guideline 301B

### 2,6-Di-tert-butyl-p-cresol:

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 4.5 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301C

### Bioaccumulative potential

#### Components:

##### Propan-2-ol:

Partition coefficient: n-octanol/water : log Pow: 0.05

##### N-Methyl-2-pyrrolidone:

Partition coefficient: n-octanol/water : log Pow: -0.46  
Method: OECD Test Guideline 107  
Remarks: The test was conducted according to guideline

##### Fluazuron:

Partition coefficient: n-octanol/water : log Pow: 5.1

##### abamectin (combination of avermectin B1a and avermectin B1b) (ISO):

Bioaccumulation : Bioconcentration factor (BCF): 52  
Partition coefficient: n-octanol/water : log Pow: 4

##### 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:

Partition coefficient: n-octanol/water : log Pow: 1.34  
Method: OECD Test Guideline 107

### 2,6-Di-tert-butyl-p-cresol:

Bioaccumulation : Species: Cyprinus carpio (Carp)  
Bioconcentration factor (BCF): 330 - 1,800  
Partition coefficient: n-octanol/water : log Pow: 5.1

### Mobility in soil

#### Components:

##### abamectin (combination of avermectin B1a and avermectin B1b) (ISO):

Distribution among environmental compartments : log Koc: > 3.6

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### II

#### Other adverse effects

No data available

### 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

Waste from residues	:	Do not dispose of waste into sewer. Dispose of in accordance with local regulations.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal. Empty containers retain residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death. If not otherwise specified: Dispose of as unused product.

### 14. TRANSPORT INFORMATION

#### International Regulations

##### UNRTDG

UN number	:	UN 1993
Proper shipping name	:	FLAMMABLE LIQUID, N.O.S. (Propan-2-ol)
Class	:	3
Packing group	:	III
Labels	:	3
Environmentally hazardous	:	no

##### IATA-DGR

UN/ID No.	:	UN 1993
Proper shipping name	:	Flammable liquid, n.o.s. (Propan-2-ol)
Class	:	3
Packing group	:	III
Labels	:	Flammable Liquids
Packing instruction (cargo aircraft)	:	366
Packing instruction (passenger aircraft)	:	355

##### IMDG-Code

UN number	:	UN 1993
Proper shipping name	:	FLAMMABLE LIQUID, N.O.S. (Propan-2-ol, Fluazuron, abamectin (combination of avermectin B1a and avermectin B1b) (ISO))
Class	:	3
Packing group	:	III
Labels	:	3
EmS Code	:	F-E, <u>S-E</u>
Marine pollutant	:	yes

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### Transport in bulk according to IMO instruments

Not applicable for product as supplied.

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## 15. REGULATORY INFORMATION

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

#### The components of this product are reported in the following inventories:

AICS : not determined

DSL : not determined

IECSC : not determined

## 16. OTHER INFORMATION

Revision Date : 24.03.2025

### Further information

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Date format : dd.mm.yyyy

### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)  
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)

ACGIH / TWA : 8-hour, time-weighted average  
ACGIH / STEL : Short-term exposure limit

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemi-

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cal Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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