SAFETY DATA SHEET

TRIPSOL®

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.04.2025	50000657	Date of first issue: 02.04.2025

Section 1: Identification

Product name	:	TRIPSOL®
Other means of identification	:	ABAMECTIN + ACRINATHRIN 12.6/22.5 G/L EW

Recommended use of the chemical and restrictions on use

Recommended use	:	Insecticide
Restrictions on use	:	Use as recommended by the label.

Manufacturer or supplier's details

Company	:	FMC New Zealand Ltd
Address	:	Level 5, 3 Te Kehu Way, Mount Wellington 1060 Auckland New Zealand
Telephone	:	+640800658080
Telefax	:	(09)-271-2961
E-mail address	:	SDS-Info@fmc.com
Emergency telephone number	:	For leak, fire, spill or accident emergencies, call: 0800 734 607 (Ixom) Medical emergency: 0800 764 766 (NZ Poisons Information Centre) 0800 111174 (24 hour Medical Emergency) 0800 387668 (Transport Emergency)

Section 2: Hazard identification

GHS Classification

Acute toxicity (Oral)	:	Category 4
Acute toxicity (Inhalation)	:	Category 3
Serious eye damage/eye irritation	:	Category 2
Skin sensitisation	:	Category 1
Carcinogenicity	:	Category 2

Reproductive toxicity	:	Category 2
Effects on or via lactation		
Specific target organ toxicity - repeated exposure	:	Category 2
Hazardous to the aquatic environment - acute hazard	:	Category 1
Hazardous to the aquatic environment - chronic hazard	:	Category 1
Hazardous to the environment	:	Hazardous to terrestrial vertebrates
Hazardous to the environment	:	Hazardous to terrestrial invertebrates

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements :
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.
H362 May cause harm to breast-fed children.
H373 May cause damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.
H433 Harmful to terrestrial vertebrates.
H443 Harmful to terrestrial invertebrates.

Precautionary statements : P103 Read carefully and follow all instructions.

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe mist or vapours.
P263 Avoid contact during pregnancy and while nursing.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
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/ hearing protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal:

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

Other hazards which do not result in classification

None known.

Section 3: Composition/information on ingredients

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Acrinathrin	101007-06-1	>= 1 -< 2.5
abamectin (combination of avermectin B1a and avermectin B1b) (ISO)	71751-41-2	>= 1 -< 2.5
Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified	64742-55-8	>= 1 -< 10
Alcohols, C11-14-iso-, C13-rich, ethoxylated	78330-21-9	>= 1 -< 2.5
Tristyryl phenol-polyethylene glycol-phosphoric acid ester	114535-82-9	>= 1 -< 2.5
octan-1-ol	111-87-5	>= 2.5 -< 10

Section 4: First-aid measures

General advice	:	Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	:	If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambulance. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	:	If on clothes, remove clothes. Do not start with flushing with water, but wipe off with dry cloth or using talcum powder, followed by washing with water and soap. Thereafter apply lidocaine, vitamin E cream or fatty skin care oil or cream. Get medical attention if irritation develops and persists.
In case of eye contact	:	Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	Do not induce vomiting without medical advice. Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	:	Exposure causes symptoms of nervous system depression. High doses cause death by respiratory failure. Acrinathrin can cause feelings of burning, tingling or numbness in exposed areas (paraesthesia). Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye irritation. Toxic if inhaled. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause harm to breast-fed children. 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 protective clothing Avoid inhalation, ingestion and contact with skin and eyes. If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Notes to physician	:	Treat symptomatically. As soon as a feeling of tingling is noted in any skin area (see

section 11), it is recommended to immediately apply lidocaine or a vitamin E cream. For this purpose lidocaine or vitamin E cream should be available at the workplace.
If allowed to penetrate the skin, the active ingredient acrinathrin in this product may cause an irritation similar to sunburn. The substance will be drawn into a non-polar environment such as a fat based oil or cream. Vitamin E cream has been reported to be beneficial against other pyrethroid insecticides. Water is highly polar and will not decrease, but may prolong the irritation. Hot water may increase the pain.
Since abamectin is believed to enhance GABA activity based on animal studies, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid).

Section 5: Fire-fighting measures

Suitable extinguishing media	:	Dry chemical, CO2, water spray or regular foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	:	Do not spread spilled material with high-pressure water streams. High volume water jet
Specific hazards during fire-fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Thermal decomposition can lead to release of irritating gases and vapours. Carbon oxides Nitrogen oxides (NOx) Fluorine compounds Oxides of phosphorus
Specific extinguishing methods	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	:	Firefighters should wear protective clothing and self-contained breathing apparatus.
Hazchem Code	:	3Z

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	:	Evacuate personnel to safe areas. Use personal protective equipment. If it can be safely done, stop the leak. Do not touch or walk through the spilled material. Never return spills in original containers for re-use. Mark the contaminated area with signs and prevent access to unauthorized personnel.

Only qualified personnel equipped with suitable protective equipment may intervene.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

Section 7: Handling and storage

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Further information on storage stability : No decomposition if stored and applied as directed.

Section 8: Exposure controls/personal protection

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis

Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified	64742-55-8	WES-TWA (Mist)	5 mg/m3	NZ OEL
		WES-STEL (Mist)	10 mg/m3	NZ OEL
		TWA (Inhalable particulate matter)	5 mg/m3	ACGIH

Personal protective equipment

Respiratory protection : In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Hand protection
Material : Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Protective measures : Plan first aid action before beginning work with this product.
Always have on hand a first-aid kit, together with proper instructions.
Wear suitable protective equipment.
When using do not eat, drink or smoke.

In the context of professional plant protection use as recommended, the end user must refer to the label and the instructions for use.

Section 9: Physical and chemical properties

Physical state : liquid

Form : liquid

Colour : milky, white, cream

Odour : Antiseptic smell

Odour Threshold	:	not determined
pH	:	6.09 Method: CIPAC MT 75.3 (1% solution in water)
Melting point/freezing point	:	not determined
Boiling point/boiling range	:	not determined
Flash point	:	109.3 °C Method: Regulation (EC) No. 440/2008, Annex, A.9
Evaporation rate	:	not determined
Self-ignition	:	383 °C Method: Tested according to Directive 92/69/EEC.
Upper explosion limit / Upper flammability limit	:	not determined
Lower explosion limit / Lower flammability limit	:	not determined
Vapour pressure	:	Not available for this mixture.
Relative vapour density	:	not determined
Relative density	:	0.9607 (20 °C)
Density	:	No data available
Bulk density	:	No data available
Solubility(ies)		
Water solubility	:	Miscible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	Not available for this mixture.
Auto-ignition temperature	:	No data available
Decomposition temperature	:	not determined
Viscosity		
Viscosity, dynamic	:	58.3 mPa,s (20 °C) 40.3 mPa.s (40 °C)

Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	Non-oxidizing
Surface tension	:	38 mN/m, Regulation (EC) No. 440/2008, Annex, A.5
Particle size	:	Not applicable

Section 10: Stability and reactivity

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed.
Conditions to avoid	:	Heat, flames and sparks. Avoid formation of aerosol.
Incompatible materials	:	Avoid strong acids, bases, and oxidizers
Hazardous decomposition products	:	Stable under recommended storage conditions.

Section 11: Toxicological information

Acute toxicity

Harmful if swallowed.
Toxic if inhaled.

Product:

Acute oral toxicity	:	LD50 (Rat, female): 365.9 mg/kg Method: OECD Test Guideline 425
Acute inhalation toxicity	:	LC50 (Rat, female): 0.8 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Assessment: The component/mixture is toxic after short term inhalation. LC50 (Rat, male): > 2.12 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402

Components:

Acrinathrin:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 1.6 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

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

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

Acute oral toxicity : LD50 (Rat): 340 mg/kg
Method: OECD Test Guideline 425
Symptoms: Fatality

LD50 (Rat): 300 - 2,000 mg/kg
Method: OECD Test Guideline 423
Symptoms: ataxia, apathy, Tremors, Fatality

Acute inhalation toxicity : LC50 (Rat, male): 0.052 - 0.54 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat, female): 1,414 mg/kg
Method: OECD Test Guideline 402
Symptoms: apathy, ataxia, Fatality

LD50 (Rat): 944 mg/kg
Method: OECD Test Guideline 402
Symptoms: apathy, ataxia, Breathing difficulties, Fatality

Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified:

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 401
Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.53 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 402
Remarks: Based on data from similar materials

Alcohols, C11-14-iso-, C13-rich, ethoxylated:

Acute oral toxicity : LD50 (Rat): 500 - 2,000 mg/kg
Remarks: Based on data from similar materials

Tristyryl phenol-polyethylene glycol-phosphoric acid ester:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 401

octan-1-ol:

Acute oral toxicity : LD50 (Rat, male): 1,800 mg/kg

LD50 (Rat, female): 720 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 2.05 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: US EPA Test Guideline OPPTS 870.1300
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit, male and female): > 1,500 - < 2,000 mg/kg

Skin corrosion/irritation

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

Product:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Mild skin irritant

Components:

Acrinathrin:

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

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

Species : Rabbit
Assessment : Not classified as irritant
Method : OECD Test Guideline 404
Result : slight or no skin irritation.

Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified:

Species	:	Rabbit
Result	:	No skin irritation
Remarks	:	Based on data from similar materials

Alcohols, C11-14-iso-, C13-rich, ethoxylated:

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

Tristyryl phenol-polyethylene glycol-phosphoric acid ester:

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

octan-1-ol:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	Mild skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Species	:	Rabbit
Result	:	Moderate eye irritation
Assessment	:	Irritating to eyes.
Method	:	OECD Test Guideline 405

Components:

Acrinathrin:

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

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

Species	:	Rabbit
Result	:	Slight or no eye irritation
Assessment	:	Not classified as irritant
Method	:	OECD Test Guideline 405

Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified:

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

Alcohols, C11-14-iso-, C13-rich, ethoxylated:

Species	:	Rabbit
Result	:	Irreversible effects on the eye

Tristyryl phenol-polyethylene glycol-phosphoric acid ester:

Species	:	Rabbit
Result	:	Eye irritation
Method	:	OECD Test Guideline 405

octan-1-ol:

Species	:	Rabbit
Result	:	Irritation to eyes, reversing within 21 days
Method	:	OECD Test Guideline 405

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

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

Product:

Test Type	:	Local lymph node assay (LLNA)
Exposure routes	:	Skin contact
Species	:	Mouse
Method	:	OECD Test Guideline 429
Result	:	May cause sensitisation by skin contact.

Components:

Acrinathrin:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Result	:	Does not cause skin sensitisation.

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

Exposure routes	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Not a skin sensitizer.

Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified:

Test Type	:	Buehler Test
Exposure routes	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Not a skin sensitizer.
Remarks	:	Based on data from similar materials

Alcohols, C11-14-iso-, C13-rich, ethoxylated:

Exposure routes	:	Skin contact
Result	:	Does not cause skin sensitisation.

octan-1-ol:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.
Remarks	:	Based on data from similar materials

Chronic toxicity

Germ cell mutagenicity

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

Components:

Acrinathrin:

Genotoxicity in vitro	:	Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells Metabolic activation: Metabolic activation Result: positive
Genotoxicity in vivo	:	Test Type: chromosome aberration assay Result: negative
Germ cell mutagenicity - Assessment	:	Weight of evidence does not support classification as a germ cell mutagen.

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

Genotoxicity in vitro	:	Test Type: Ames test Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative GLP: yes
Genotoxicity in vivo	:	Test Type: Micronucleus test Species: mice Result: negative GLP: yes
Germ cell mutagenicity - Assessment	:	No genotoxic potential

Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified:

Genotoxicity in vitro	:	Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Result: negative Remarks: Based on data from similar materials

Test Type: reverse mutation assay
Test system: TA98
Metabolic activation: Metabolic activation
Result: negative
Remarks: Based on data from similar materials

Genotoxicity in vivo : Species: Mouse (male and female)
Application Route: Intraperitoneal injection
Method: OECD Test Guideline 474
Result: negative
Remarks: Based on data from similar materials

octan-1-ol:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

Test Type: reverse mutation assay
Method: OECD Test Guideline 471
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

Germ cell mutagenicity - Assessment : Weight of evidence does not support classification as a germ cell mutagen.

Carcinogenicity

Suspected of causing cancer.

Product:

Carcinogenicity - Assessment : Limited evidence of a carcinogenic effect.

Components:

Acrinathrin:

Species : Rat, female
Method : OECD Test Guideline 453
Result : positive

Species : Mouse
Method : OECD Test Guideline 451
Result : negative

Species : Rat
Method : OECD Test Guideline 453
Result : negative

Carcinogenicity - Assessment	:	Weight of evidence does not support classification as a carcinogen

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

Method	:	OECD Test Guideline 451
Remarks	:	Not classified
Method	:	OECD Test Guideline 453
Remarks	:	Not classified
Carcinogenicity - Assessment	:	Weight of evidence does not support classification as a carcinogen

Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified:

Species	:	Mouse
Application Route	:	Dermal
Exposure time	:	78 weeks
Result	:	negative
Remarks	:	Based on data from similar materials

Reproductive toxicity

Suspected of damaging fertility or the unborn child.
May cause harm to breast-fed children.

Components:

Acrinathrin:

Reproductive toxicity - Assessment	:	No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

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

Reproductive toxicity - Assessment	:	Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified:

Effects on fertility	:	Test Type: reproductive and developmental toxicity study Species: Rat, male and female Application Route: Oral Early Embryonic Development: NOAEL: 1,000 mg/kg bw/day Method: OECD Test Guideline 421 Result: negative Remarks: Based on data from similar materials
Effects on foetal development	:	Test Type: Pre-natal Species: Rat Application Route: Dermal Teratogenicity: NOAEL: 2,000 mg/kg bw/day Symptoms: Maternal effects Result: negative Remarks: Based on data from similar materials

octan-1-ol:

Effects on fertility	:	Test Type: one-generation reproductive toxicity Species: Rat, male and female Application Route: Oral Dose: 10, 100, 1000 mg/kg bw/day General Toxicity - Parent: NOAEL: 1,000 mg/kg bw/day General Toxicity F1: NOAEL: 1,000 mg/kg bw/day Result: negative
Effects on foetal development	:	Species: Rat Application Route: Oral Dose: 0,130,650,975,1300 mg/kg bw/day Duration of Single Treatment: 20 d General Toxicity Maternal: LOAEL: 650 mg/kg bw/day Embryo-foetal toxicity: NOAEL: 1,300 mg/kg bw/day Symptoms: Maternal effects Method: OECD Test Guideline 414
Reproductive toxicity - Assessment	:	Weight of evidence does not support classification for reproductive toxicity

STOT - single exposure

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

Components:

Acrinathrin:

Remarks	:	No significant adverse effects were reported

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Product:

Assessment	:	The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Components:

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

Target Organs	:	Nervous system
Assessment	:	The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1.

octan-1-ol:

Assessment	:	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

Acrinathrin:

Species	:	Rat
LOEL	:	9 mg/kg
Application Route	:	Oral
Exposure time	:	90 day
Target Organs	:	Skin, Nervous system

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

Species	:	Dog
LOEL	:	0.5 mg/kg
Application Route	:	Oral
Exposure time	:	18 weeks
Method	:	OECD Test Guideline 409

Species	:	Rat
LOAEC	:	0.0027 mg/l
Application Route	:	Inhalation
Exposure time	:	30 d

Species	:	Rat, female
NOAEL	:	3.0 mg/kg
LOAEL	:	6.7 mg/kg
Application Route	:	Oral
Exposure time	:	28 d
Dose	:	0, 3, 6.7, 8.9, 11.5 mg/kg bw/day
Method	:	OECD Test Guideline 407
GLP	:	yes
Symptoms	:	Tremors, Fatality

Species	:	Rat, female
NOAEL	:	3.8 mg/kg
LOAEL	:	9.3 mg/kg
Application Route	:	Oral
Exposure time	:	90 d
Dose	:	0, 1.8, 3.8, 9.3, 9.6 mg/kg bw/day
Method	:	OECD Test Guideline 408
GLP	:	yes

Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified:

Species	:	Rat, male
LOAEL	:	125 mg/kg
Application Route	:	Oral - gavage
Exposure time	:	13 weeks
Remarks	:	Effects are of limited toxicological significance. Based on data from similar materials

Species	:	Rat, male and female
NOAEC	:	> 0.98 mg/l
Application Route	:	inhalation (dust/mist/fume)

Exposure time	:	4 weeks
Remarks	:	No significant adverse effects were reported Based on data from similar materials

octan-1-ol:

Species	:	Rat, male
NOAEL	:	1127 mg/kg bw/day
Application Route	:	Oral
Exposure time	:	13 Weeks
Dose	:	182, 374, 1127 mg/kg bw/day

Species	:	Rat, female
NOAEL	:	1243 mg/kg bw/day
Application Route	:	Oral
Exposure time	:	13 Weeks
Dose	:	216, 427, 1243 mg/kg bw/day

Aspiration toxicity

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

Components:

Acrinathrin:

The substance does not have properties associated with aspiration hazard potential.

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

No aspiration toxicity classification

Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks	:	Low exposure can cause non-specific symptoms (e.g. nausea, vomiting, diarrhoea, itching). Higher doses can cause symptoms of nervous system depression, such as pupil dilation, excitation, incoordination, tremors, convulsions, lethargy, coma. High doses can cause death by respiratory failure. Inhalation of the substance/product is uncomfortable and can result in coughing and difficulty breathing. This effect should also be taken as a warning to avoid further exposure.

Components:

Acrinathrin:

Remarks	:	On contact, the active ingredient can cause feelings of burning, tingling or numbness in exposed areas (paraesthesia), which is harmless at low exposure, but can be quite painful, especially in the eye. The effect may result from splash, aero-

sol or transfer from contaminated gloves. The effect is transient, lasting up to 24 hours, but may in exceptional cases last longer. It may be considered as a warning that overexposure has occurred and that work practice should be reviewed.

Inhalation of the substance/product is uncomfortable and can result in coughing and difficulty breathing. This effect should also be taken as a warning to avoid further exposure.

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

Remarks : Exposure causes symptoms of nervous system depression, such as pupil dilation, vomiting, excitation, incoordination, tremors, lethargy, coma. High doses cause death by respiratory failure.

Section 12: Ecological information

Ecotoxicity

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.307 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.00644 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 60.8 mg/l
Exposure time: 72 h

Toxicity to soil dwelling organisms : LC50 (Eisenia fetida (earthworms)): 1,875 mg/kg
Exposure time: 14 d

Toxicity to terrestrial organisms : LD50 (Coturnix japonica (Japanese quail)): > 2,000 mg/kg

LC50 (Apis mellifera (bees)): 0.153 µg/bee
Exposure time: 48 h
End point: Acute oral toxicity

LC50 (Apis mellifera (bees)): 0.218 µg/bee
Exposure time: 48 h
End point: Acute contact toxicity

Ecotoxicology Assessment

Other organisms relevant to the environment : Harmful to terrestrial vertebrates., Harmful to terrestrial invertebrates.

Components:

Acrinathrin:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 0.0061 mg/l Exposure time: 96 h LC50 (Pimephales promelas (fathead minnow)): 0.002 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0.000022 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	IC50 (Scenedesmus subspicatus): > 100 mg/l Exposure time: 72 h
M-Factor (Acute aquatic toxicity)	:	10,000
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 0.0063 µg/l Exposure time: 21 d
M-Factor (Chronic aquatic toxicity)	:	10,000
Toxicity to soil dwelling organisms	:	LC50 (Eisenia fetida (earthworms)): > 186 mg/kg Exposure time: 14 d
Toxicity to terrestrial organisms	:	LD50 (Apis mellifera (bees)): 0.08 µg/bee End point: Acute contact toxicity

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

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 0.027 - 0.044 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 GLP: yes
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0.0008 - 0.0015 mg/l End point: Immobilization Exposure time: 48 h Method: OECD Test Guideline 202 GLP: yes EC50 (Daphnia magna (Water flea)): 0.0002 - 0.00028 mg/l End point: Immobilization Exposure time: 48 h Method: OECD Test Guideline 202 GLP: yes EC50 (Daphnia pulex (Water flea)): 0.000159 mg/l End point: Immobilization Exposure time: 48 h Method: OECD Test Guideline 202 GLP: yes

NOEC (Daphnia pulex (Water flea)): 0.000089 mg/l
End point: Immobilization
Exposure time: 48 h
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants : EC50 (Scenedesmus capricornutum (fresh water algae)): 56.68 - 85.41 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: yes

Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): 0.0044 mg/l
Exposure time: 28 d
Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.00003 mg/l
End point: reproduction
Exposure time: 21 d
Method: OECD Test Guideline 202

Toxicity to soil dwelling organisms : LC50 (Eisenia fetida (earthworms)): 14.24 - 18.37 mg/kg
Exposure time: 14 d
Method: OECD Test Guideline 207

Method: OECD Test Guideline 216
Remarks: No significant adverse effect on nitrogen mineralization.

Method: OECD Test Guideline 217
Remarks: No significant adverse effect on carbon mineralization.

Toxicity to terrestrial organisms : LD50 (Apis mellifera (bees)): 0.00071 - 0.00099 µg/bee
Exposure time: 48 h
End point: Acute contact toxicity
Method: OECD Test Guideline 214

LD50 (Coturnix japonica (Japanese quail)): > 5000 ppm
Remarks: Dietary

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified:

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203

Toxicity to daphnia and other : EL50 (Daphnia magna (Water flea)): > 10,000 mg/l

aquatic invertebrates		Exposure time: 24 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	NOELR (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to fish (Chronic toxicity)	:	NOELR (Oncorhynchus mykiss (rainbow trout)): > 1,000 mg/l Exposure time: 14 d Remarks: The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOELR (Daphnia magna (Water flea)): 10 mg/l Exposure time: 21 d Test Type: semi-static test Method: OECD Test Guideline 211
Toxicity to microorganisms	:	NOEL: > 1.93 mg/l Exposure time: 0.16 h

Alcohols, C11-14-iso-, C13-rich, ethoxylated:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 10 - 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 LC50 (Leuciscus idus (Golden orfe)): > 1 - 10 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50: > 1 - 10 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (algae): > 1 - 10 mg/l Exposure time: 72 h EC10 (algae): > 0.1 - < 1 mg/l

Tristyryl phenol-polyethylene glycol-phosphoric acid ester:

Toxicity to fish	:	LC50 (Leuciscus idus (Golden orfe)): 100 - 500 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	NOEC (Desmodesmus subspicatus (green algae)): > 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l Exposure time: 72 h

Method: OECD Test Guideline 201

octan-1-ol:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 13.3 mg/l Exposure time: 96 h Test Type: flow-through test
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 20 mg/l Exposure time: 24 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC10 (Desmodesmus subspicatus (green algae)): 4.2 mg/l Exposure time: 48 h Test Type: static test EC50 (Desmodesmus subspicatus (green algae)): 6.5 mg/l Exposure time: 48 h Test Type: static test
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 1 mg/l Exposure time: 21 d Method: OECD Test Guideline 211
Toxicity to microorganisms	:	(Protozoa): 44 mg/l Exposure time: 72 h Test Type: Cell multiplication inhibition test Remarks: Based on data from similar materials

Persistence and degradability

Product:

Biodegradability	:	Remarks: Product contains minor amounts of not readily biodegradable components, which may not be degradable in waste water treatment plants.

Components:

Acrinathrin:

Biodegradability	:	Result: Not readily biodegradable.
Stability in water	:	Degradation half life: 1 d

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

Biodegradability	:	Result: Not readily biodegradable. Remarks: It undergoes degradation in the environment and in waste water treatment plants.

Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified:

Biodegradability	:	Result: Inherently biodegradable. Biodegradation: 31 %

Exposure time: 28 d
Method: OECD Test Guideline 301F
Remarks: Based on data from similar materials

Alcohols, C11-14-iso-, C13-rich, ethoxylated:

Biodegradability : Result: Readily biodegradable.
Biodegradation: > 60 %
Exposure time: 28 d
Method: OECD Test Guideline 301E

Tristyryl phenol-polyethylene glycol-phosphoric acid ester:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 30 - 40 %
Method: OECD Test Guideline 302B

octan-1-ol:

Biodegradability : Inoculum: activated sludge
Result: Readily biodegradable.
Biodegradation: 82.2 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data is available on the product itself.

Components:

Acrinathrin:

Bioaccumulation : Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 538
Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: 5.24 (25 °C)

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

Bioaccumulation : Species: Danio rerio (zebra fish)
Bioconcentration factor (BCF): 54
Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: 5.5

octan-1-ol:

Partition coefficient: n-octanol/water : log Pow: 3.5 (23 °C)
pH: 5.7

Mobility in soil

Product:

Distribution among environmental compartments : Remarks: No data is available on the product itself.

Components:

Acrinathrin:

Distribution among environmental compartments : Remarks: immobile

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

Distribution among environmental compartments : Remarks: Mobile in soils

Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Section 13: Disposal considerations

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Do not re-use empty containers.
Packaging that is not properly emptied must be disposed of as the unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14: Transport information

International Regulations

UNRTDG

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Abamectin, Acrinathrin)

Class	:	9
Packing group	:	III
Labels	:	9
Environmentally hazardous	:	yes

IATA-DGR

UN/ID No.	:	UN 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (Abamectin, Acrinathrin)
Class	:	9
Packing group	:	III
Labels	:	Miscellaneous
Packing instruction (cargo aircraft)	:	964
Packing instruction (passenger aircraft)	:	964
Environmentally hazardous	:	yes

IMDG-Code

UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Abamectin, Acrinathrin)
Class	:	9
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Marine pollutant	:	yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

NZS 5433

UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Abamectin, Acrinathrin)
Class	:	9
Packing group	:	III
Labels	:	9
Hazchem Code	:	3Z
Marine pollutant	:	yes

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.

Section 15: Regulatory information

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

HSNO Approval Number

HSR100716
ACVM Approval No.: P008598

Tolerable Exposure Limits (TEL)

Not applicable

Environmental Exposure Limits (EEL)

Not applicable

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

TCSI	:	Not in compliance with the inventory
TSCA	:	Product contains substance(s) not listed on TSCA inventory.
AIIC	:	Not in compliance with the inventory
DSL	:	This product contains chemical substance(s) exempt from CEPA DSL Inventory requirements. It is regulated as a pesticide subject to Pest Control Products Act (PCPA) requirements. Read the PCPA label, authorized under the Pest Control Products Act, prior to using or handling this pest control product.
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	Not in compliance with the inventory
NZIoC	:	Not applicable
TECI	:	Not in compliance with the inventory

Section 16: Other information

Revision Date	:	02.04.2025
Date format	:	dd.mm.yyyy

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
NZ OEL	:	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants

ACGIH / TWA	:	8-hour, time-weighted average
NZ OEL / WES-TWA	:	Workplace Exposure Standard - Time Weighted average
NZ OEL / WES-STEL	:	Workplace Exposure Standard - 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 Chemical 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

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