SAFETY DATA SHEET
according to the Globally Harmonized System

RUFAST®

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10.06.2025	50000688	Date of first issue: 10.06.2025

1. IDENTIFICATION

Product name : RUFAST®

Manufacturer or supplier's details

Company : FMC LATINOAMÉRICA S.A. SUCURSAL

Address : AV. CIRCUNVALACIÓN DEL CLUB GOLF
LOS INCAS NO. 208, INTERIOR, 705-B,
TORRE 111 URBANIZACIÓN CLUB GOLF
LOS INCAS SANTIAGO DE SURCO.
LIMA, PERÚ

E-mail address : SDS-Info@fmc.com

Emergency telephone : 1 703 / 741-5970 (CHEMTREC - International)
Peru: 51-17071295 (CHEMTREC)

Medical Emergency Number : Desde Perú: SAMU: 106;
CISPROQUIM®: 080-050-847;
FMC LATINOAMERICA S.A. SUCURSAL: 421-4811;
Desde Bogotá: 288 60 12; Línea Nacional: 01 8000 916012
Desde Ecuador: 1800 593005 (Quito, La Sierra, Centro y Norte).
Desde Venezuela: 0800 1005012

Recommended use of the chemical and restrictions on use

Recommended use : Insecticide

Restrictions on use : Use as recommended by the label.

2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Acute toxicity (Dermal) : Category 4

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 1

GHS label elements

Hazard pictograms :

Signal Word : WARNING

Hazard Statements : H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements :

Prevention:

P261 Avoid breathing mist or vapors.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or with adequate ventilation.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing.

Response:

P301 + P317 + P330 IF SWALLOWED: Get medical help. Rinse mouth.
P302 + P352 + P317 IF ON SKIN: Wash with plenty of water. Get medical help.
P304 + P340 + P317 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.

Disposal:

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

Other hazards which do not result in classification

Hazard Statements required by Andean Technical Manual for the Registration and Control of Chemical Pesticides for Agricultural Use (Resolution no. 2075):
Harmful in contact with skin.
Harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
diethyl phthalate	84-66-2	>= 20 - < 25
Acrinathrin	101007-06-1	>= 2,5 - < 10
Silicon dioxide	112926-00-8	>= 1 - < 10

4. FIRST AID MEASURES

General advice	:	Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	:	If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	:	Wash off with soap and water. If symptoms persist, call a physician. Wash contaminated clothing before re-use.
In case of eye contact	:	Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	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	:	Harmful if swallowed, in contact with skin or if inhaled.
Protection of first-aiders	:	Avoid inhalation, ingestion and contact with skin and eyes.
Notes to physician	:	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Dry chemical, CO2, water spray or regular foam.
Unsuitable extinguishing media	:	Do not spread spilled material with high-pressure water streams.
Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Fire may produce irritating, corrosive and/or toxic gases. Carbon oxides Nitrogen oxides (NOx) Hydrogen fluoride Hydrogen cyanide phosphorus oxides Fluorinated compounds

Specific extinguishing methods	:	Remove undamaged containers from fire area if it is safe to do so. Use a water spray to cool fully closed containers. Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for fire-fighters	:	Firefighters should wear protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Immediately evacuate personnel to safe areas. Ensure adequate ventilation. 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	:	Never return spills in original containers for re-use. Collect as much of the spill as possible with a suitable absorbent material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Advice on safe handling	:	Avoid formation of aerosol. Do not breathe vapors/dust. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations.
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.
Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : The product is stable under normal conditions of warehouse storage.
Protect against strong heat, frost and excessive sunlight.
Keep in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

Materials to avoid : Do not store near acids.

Recommended storage temperature : 0 - 30 °C

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
diethyl phthalate	84-66-2	TWA	5 mg/m3	PE OEL
		TWA	5 mg/m3	ACGIH
Silicon dioxide	112926-00-8	TWA	10 mg/m3	PE OEL
		TWA	10 mg/m3	PE OEL

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

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.
Hygiene measures	:	General industrial hygiene practice. Avoid contact with skin, eyes and clothing. Do not inhale aerosol. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	:	liquid
Color	:	off-white
Odor	:	slight, aromatic
Odor Threshold	:	not determined
pH	:	4,57 (25 °C) (undiluted)
Melting point/freezing point	:	not determined
Boiling point/boiling range	:	not determined
Flash point	:	> 100 °C
Evaporation rate	:	not determined
Self-ignition	:	445 °C
Upper explosion limit / Upper flammability limit	:	not determined
Lower explosion limit / Lower flammability limit	:	not determined

Vapor pressure	:	Not available for this mixture.
Relative vapor density	:	not determined
Relative density	:	not determined
Density	:	1.068 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	emulsifiable
Partition coefficient: n-octanol/water	:	Not available for this mixture.
Autoignition temperature	:	No data available
Decomposition temperature	:	not determined
Viscosity		
Viscosity, dynamic	:	534 mPa.s (25 °C)
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	Non-oxidizing
Molecular weight	:	Not applicable
Particle size	:	Not applicable

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	:	Protect from frost, heat and sunlight. Avoid extreme temperatures. Avoid formation of aerosol. Heating of the product will produce harmful and irritant vapours.
Incompatible materials	:	Avoid strong acids, bases, and oxidizers.

Hazardous decomposition products : No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed, in contact with skin or if inhaled.

Product:

Acute oral toxicity : LD50(Rat, female): > 2.000 mg/kg
Method: OECD Test Guideline 423
Assessment: The component/mixture is minimally toxic after single ingestion.

Assessment: The component/mixture is moderately toxic after single ingestion.
Remarks: Resolution no. 2075

Acute inhalation toxicity : LC50(Rat, male and female): > 4,84 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The component/mixture is moderately toxic after short term inhalation.
Remarks: Evident toxicity

Assessment: The component/mixture is moderately toxic after short term inhalation.
Remarks: Resolution no. 2075

Acute dermal toxicity : LD50(Rat, male and female): > 4.000 mg/kg
Method: OECD Test Guideline 402
Assessment: The component/mixture is minimally toxic after single contact with skin.

Assessment: The component/mixture is moderately toxic after single contact with skin.
Remarks: Resolution no. 2075

Components:

diethyl phthalate:

Acute oral toxicity : LD50 (Rat, male and female): > 5.591 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 4,63 mg/l
Exposure time: 6 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat, male and female): > 11.181 mg/kg

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

Silicon dioxide:

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 : LC0 (Rat, male and female): > 0,14 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Remarks: Based on data from similar materials
no mortality

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg
Remarks: Based on data from similar materials

Skin corrosion/irritation

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

Product:

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

Components:

diethyl phthalate:

Species : Rabbit
Method : Draize Test
Result : No skin irritation

Acrinathrin:

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

Silicon dioxide:

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

Serious eye damage/eye irritation

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

Product:

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

Components:

diethyl phthalate:

Species	:	Rabbit
Result	:	No eye irritation

Acrinathrin:

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

Silicon dioxide:

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

Respiratory or skin sensitization

Skin sensitization

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

Respiratory sensitization

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

Components:

diethyl phthalate:

Test Type	:	Buehler Test
Species	:	Guinea pig
Result	:	Does not cause skin sensitization.

Acrinathrin:

Test Type	:	Maximization Test
Species	:	Guinea pig
Result	:	Does not cause skin sensitization.

Germ cell mutagenicity

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

Product:

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

Components:

diethyl phthalate:

Genotoxicity in vitro	:	Test Type: Mouse lymphoma assay Test system: mouse lymphoma cells Method: OECD Test Guideline 476 Result: negative Test Type: Chromosome aberration test in vitro Test system: Human lymphocytes Method: OECD Test Guideline 473 Result: negative Test Type: reverse mutation assay Method: OECD Test Guideline 471 Result: negative
Germ cell mutagenicity - Assessment	:	Weight of evidence does not support classification as a germ cell mutagen.

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.

Silicon dioxide:

Genotoxicity in vitro	:	Test Type: reverse mutation assay Method: OECD Test Guideline 471 Result: negative Remarks: Based on data from similar materials
Genotoxicity in vivo	:	Species: Rat (male)

Application Route: Inhalation
Result: negative
Remarks: Based on data from similar materials

Carcinogenicity

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

Product:

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

Components:

diethyl phthalate:

Species	:	Rat, male
Application Route	:	Dermal
Exposure time	:	103 weeks
Dose	:	320, 1015 mg/kg/d
	:	>= 1.015 mg/kg bw/day
Result	:	negative
Species	:	Rat, female
Application Route	:	Dermal
Exposure time	:	103 weeks
Dose	:	520, 1015 mg/kg/d
	:	>= 1.015 mg/kg bw/day
Result	:	negative
Carcinogenicity - Assessment	:	Weight of evidence does not support classification as a carcinogen

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

Silicon dioxide:

Species	:	Rat
Application Route	:	Oral

Exposure time	:	103 weeks
Method	:	OECD Test Guideline 453
Result	:	negative
Remarks	:	Based on data from similar materials

Reproductive toxicity

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

Product:

Reproductive toxicity - Assessment	:	Weight of evidence does not support classification for reproductive toxicity

Components:

diethyl phthalate:

Effects on fertility	:	Test Type: Two-generation study Species: Rat, male and female Application Route: Oral Dose: 0, 600, 3000, 15000 parts per million General Toxicity Parent: NOAEL: 15.000 General Toxicity F1: NOAEL: 3.000 Method: OECD Test Guideline 416 Result: negative
Effects on fetal development	:	Test Type: Developmental Toxicity Screening Test Species: Rat Application Route: Oral Dose: 0, 0.25, 2.5 & 5.0% General Toxicity Maternal: NOAEL: 0,25 Developmental Toxicity: NOAEL: 2,5 Result: Embryotoxic effects and adverse effects on the offspring were detected only at high maternally toxic doses

Acrinathrin:

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

Silicon dioxide:

Effects on fertility	:	Species: Rat General Toxicity Parent: NOAEL: 1,5 mg/kg bw/day Fertility: NOAEL: > 6,9 mg/kg body weight
Effects on fetal development	:	Test Type: Embryo-fetal development Species: Rat Application Route: Oral General Toxicity Maternal: NOAEL: 2 mg/kg bw/day Embryo-fetal toxicity.: NOAEL: 2 mg/kg bw/day Symptoms: Reduced fetal weight., Reduced number of viable fetuses.

Test Type: Embryo-fetal development
Species: Rabbit
Application Route: Oral
General Toxicity Maternal: NOAEL: 500 mg/kg bw/day
Embryo-fetal toxicity.: NOAEL: 500 mg/kg bw/day
Symptoms: Reduced fetal weight., fused or incompletely ossified sternebrae

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

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

Components:

diethyl phthalate:

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

Repeated dose toxicity

Components:

diethyl phthalate:

Species	:	Rat, male and female
NOAEL	:	150 mg/kg
Application Route	:	Oral
Exposure time	:	2 - 16 w
Dose	:	0, 150, 750, 3160mg/kg

Acrinathrin:

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

Silicon dioxide:

Species	:	Rat, male and female
NOAEL	:	2.500 mg/kg
Application Route	:	Oral
Exposure time	:	13 weeks
Method	:	OECD Test Guideline 408

Remarks	:	Based on data from similar materials
Species	:	Rat, male and female
NOAEL	:	1,3 - 10 mg/l
LOAEL	:	5,9 mg/l
Application Route	:	Inhalation
Exposure time	:	13 weeks
Method	:	OECD Test Guideline 413
Remarks	:	Based on data from similar materials

Aspiration toxicity

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

Product:

No aspiration toxicity classification

Components:

Acrinathrin:

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

Experience with human exposure

Components:

diethyl phthalate:

General Information	:	Symptoms: male reproductive effects, central nervous system effects
Skin contact	:	Symptoms: Dermatitis, sensitizing effects

Further information

Product:

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, aerosol 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.
Remarks	:	If swallowed, the active ingredient may produce non-specific symptoms (e.g. nausea, vomiting, diarrhoea). Large doses may produce disturbance of the central nervous system (e.g. itching, tremors, convulsions).
Remarks	:	No data available

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, aerosol 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.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 1,7 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 3,7 µg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Scenedesmus subspicatus): > 1.000 mg/l
Toxicity to terrestrial organisms	:	LC50: 2 µg/bee Exposure time: 48 h End point: Acute contact toxicity Species: Apis mellifera (bees) LC50: 2 - 12 µg/bee Exposure time: 48 h End point: Acute oral toxicity Species: Apis mellifera (bees)

Components:

diethyl phthalate:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 12 mg/l Exposure time: 96 h Test Type: flow-through test
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia): 90 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae/aquatic plants	:	EC10 (Desmodesmus subspicatus (green algae)): 9 mg/l Exposure time: 72 h Test Type: static test

		EC50 (Desmodesmus subspicatus (green algae)): 45 mg/l Exposure time: 72 h Test Type: static test
Toxicity to microorganisms	:	EC20 (activated sludge): 400 mg/l Exposure time: 0,5 h Test Type: Respiration inhibition Method: ISO 8192
Toxicity to fish (Chronic toxicity)	:	NOEC: 5 mg/l Exposure time: 28 d Species: Cyprinus carpio (Carp) Test Type: semi-static test
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 25 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Test Type: flow-through test
Toxicity to soil dwelling organisms	:	LC50: 0.85 mg/cm2 Exposure time: 48 d Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207

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: 0,0063 µg/l Exposure time: 21 d Species: Daphnia magna (Water flea)
M-Factor (Chronic aquatic toxicity)	:	10.000
Toxicity to soil dwelling organisms	:	LC50: > 186 mg/kg Exposure time: 14 d Species: Eisenia fetida (earthworms)
Toxicity to terrestrial organ-	:	LD50: 0.08 µg/bee

isms		End point: Acute contact toxicity Species: Apis mellifera (bees)

Silicon dioxide:

Toxicity to fish	:	LC50 (Brachydanio rerio (zebrafish)): > 10.000 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 10.000 mg/l Exposure time: 24 h Method: OECD Test Guideline 202 Remarks: Based on data from similar materials
Toxicity to algae/aquatic plants	:	NOELR (Desmodesmus subspicatus (green algae)): 10.000 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: Based on data from similar materials

Ecotoxicology Assessment

Acute aquatic toxicity	:	This product has no known ecotoxicological effects.
Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.

Persistence and degradability

Product:

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

Components:

diethyl phthalate:

Biodegradability	:	Inoculum: activated sludge, adapted Result: Readily biodegradable. Biodegradation: 94,6 % Exposure time: 28 d

Acrinathrin:

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

Silicon dioxide:

Biodegradability	:	Result: Not biodegradable Remarks: Based on data from similar materials

Bioaccumulative potential

Product:

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

Components:

diethyl phthalate:

Bioaccumulation : Bioconcentration factor (BCF): 13,1
Method: QSAR

Partition coefficient: n-octanol/water : log Pow: 2,2 (40 °C)
pH: 7,5

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)

Silicon dioxide:

Bioaccumulation : Bioconcentration factor (BCF): 3,16
Remarks: Based on data from similar materials

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

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 with long lasting effects.

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

Global warming potential

Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) of the United Nations Framework Convention on Climate Change (UNFCCC)

Components:

octamethylcyclotetrasiloxane [D4]:

20-year global warming potential: 2,66
100-year global warming potential: 0,739
500-year global warming potential: 0,211
Atmospheric lifetime: 0,027 yr
Radiative efficiency: 0,12 Wm2ppb
Further information: Miscellaneous compounds

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	:	It is prohibited to reuse, bury, burn, or sell containers. Rinsable containers: Triple rinse containers of less than 20 liters and pressure rinse containers of 20 liters or more. Triple rinsing: Add water up to ¼ of the container's capacity, close and shake for 30 seconds. Pour the rinse water into the mixing tank, considering this volume of water within the recommended volume for mixing preparation. Perform this procedure three times. Pressure rinsing: Activate the pressure rinsing device for 30 seconds, considering the volume of water used as part of the recommended volume for mixing preparation. In both procedures, punctured the container on its base without damaging the label. In all cases, take the empty containers to collection points indicated by the local empty containers program.

14. TRANSPORT INFORMATION

International Regulations

UNRTDG

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

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

Control Act of precursor chemicals and controlled products. : Not applicable

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

TCSI	:	On the inventory, or 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 the following components that are not on the Canadian DSL nor NDSL.

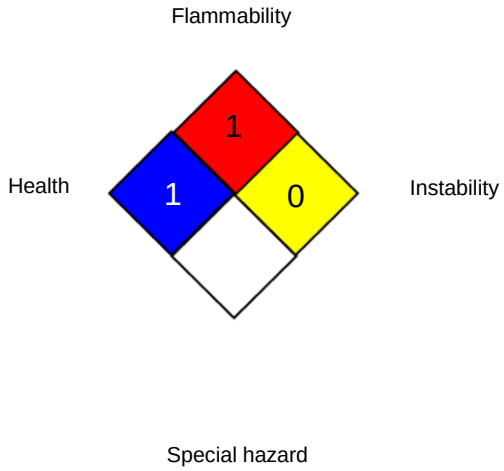
		Acrinathrin Poly(oxy-1,2-ethanediyl), α-[2,4,6-tris(1-phenylethyl)phenyl]-ω-hydroxy-, phosphate, potassium salt Smectite-group minerals
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	Not in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

16. OTHER INFORMATION

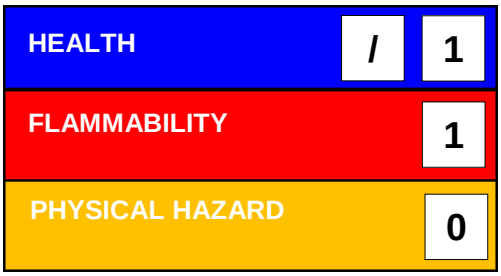
Revision Date	:	10.06.2025
Date format	:	dd.mm.yyyy

Further information

NFPA:



HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)

PE OEL	:	Peru. Regulation adopting Limit Values for Chemical Agents in the Working Environment.
ACGIH / TWA	:	8-hour, time-weighted average
PE OEL / TWA	:	Time Weighted Average

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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