MATERIAL SAFETY DATA SHEET

INSTINCT®

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	28.01.2025	50000636	Date of first issue: 28.01.2025

1. IDENTIFICATION

Product name	:	INSTINCT®
Other means of identification	:	FENPROPIDIN 750 g/l EC

Manufacturer or supplier's details

Company	:	FMC LATINOAMÉRICA S.A.
Address	:	AV. RODRIGO DE CHÁVEZ Y JUAN TANCA MARENGO. CIUDAD COLÓN. TORRE EMPRESARIAL 2 PISO 3 OFICINA 308. GUAYAQUIL - ECUADOR (593 04) 3901953
E-mail address	:	SDS-Info@fmc.com
Emergency telephone	:	1 703 / 741-5970 (CHEMTREC - International)
Medical Emergency Number	:	Desde Ecuador: 1800 593005 (Quito, La Sierra, Centro y Norte). Desde Bogotá: 288 60 12; Línea Nacional: 01 8000 916012 Desde Venezuela: 0800 1005012 Desde Perú: SAMU: 106; CISPROQUIM®: 080-050-847; FMC LATINOAMERICA S.A. SUCURSAL: 421-4811;

Recommended use of the chemical and restrictions on use

Recommended use	:	Fungicide
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
Skin corrosion/irritation	:	Category 2
Serious eye damage/eye irritation	:	Category 1
Aspiration hazard	:	Category 1

Short-term (acute) aquatic hazard	:	Category 1
Long-term (chronic) aquatic hazard	:	Category 1

GHS label elements

Hazard pictograms :

Signal Word : DANGER

Hazard Statements : H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H318 Causes serious eye damage.
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/ eye protection/ face protection/ hearing protection.

Response:

P301 + P316 IF SWALLOWED: Get emergency medical help immediately.
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.
P305 + P354 + P338 + P317 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help.
P331 Do NOT induce vomiting.
P332 + P317 If skin irritation occurs: 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

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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
PIPERIDINE, 1-(3-(4-(1,1-DIMETHYLETHYL)P	67306-00-7	>= 70 - < 90
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified	64742-94-5	>= 2,5 - < 10
Poly(oxy-1,2-ethanediyl), .alpha.-isotridecyl-.omega.-hydroxy-	9043-30-5	>= 2,5 - < 10
calcium dodecylbenzenesulphonate	26264-06-2	>= 1 - < 2,5
2-ethylhexan-1-ol	104-76-7	>= 1 - < 2,5

4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Consult a physician.
Show this material safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
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 : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
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 induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.
Take victim immediately to hospital.

Most important symptoms and effects, both acute and delayed	:	Harmful if swallowed, in contact with skin or if inhaled. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye damage. Swallowing or inhaling may result in sudden shortness of breath, coughing, nausea and or abdominal pain. Skin contact may result in itching and redness. Eye contact may result in itching, watery eyes, light sensitivity, pain, and/or blurred vision.
Protection of first-aiders	:	Avoid inhalation, ingestion and contact with skin and eyes.
Notes to physician	:	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point	:	102 °C
Ignition temperature	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
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 Sulfur oxides
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. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. 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 fire-fighters	:	Firefighters should wear protective clothing and self-contained breathing apparatus.

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. Ensure adequate ventilation.
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. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Advice on safe handling	:	Do not breathe vapors/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. To avoid spills during handling keep bottle on a metal tray. 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. 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type	Control parame-	Basis

		(Form of exposure)	ters / Permissible concentration	
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified	64742-94-5	TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
2-ethylhexan-1-ol	104-76-7	TWA	5 ppm	ACGIH

Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.

Hand protection
Material : Protective gloves

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.

Hygiene measures : 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 : light brown, yellow

Odor : mild, aromatic

Odor Threshold : No data available

pH : 8,5

Melting point/ range : No data available

Boiling point/boiling range : No data available

Flash point	:	102 °C
Evaporation rate	:	No data available
Self-ignition	:	282 °C
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	0,92 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	Miscible
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	26,6 mPa.s (20 °C)
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	Non-oxidizing
Molecular weight	:	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	:	Heat, flames and sparks. Avoid extreme temperatures. Avoid formation of aerosol.
Incompatible materials	:	Avoid strong acids, bases, and oxidizers.
Hazardous decomposition products	:	No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

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

Product:

Acute oral toxicity	:	LD50(Rat): 1.049 mg/kg Method: OECD Test Guideline 425
Acute inhalation toxicity	:	LC50(Rat): 2,15 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 Assessment: The component/mixture is moderately toxic after single contact with skin. Remarks: Resolution no. 2075

Components:

PIPERIDINE, 1-(3-(4-(1,1-DIMETHYLETHYL)P:

Acute oral toxicity	:	LD50 (Rat): 1.452 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	:	LC50 (Rat): 1,22 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403
Acute dermal toxicity	:	LD50: > 4.000 mg/kg Method: OECD Test Guideline 402

Solvent naphtha (petroleum), heavy arom.; Kerosine — 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): > 4,688 mg/l Exposure time: 4 h Test atmosphere: vapor Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	:	LD50 (Rabbit): > 2.000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute dermal toxicity

Poly(oxy-1,2-ethanediyl), .alpha.-isotridecyl-.omega.-hydroxy-:

Acute oral toxicity	:	LD50 (Rat): 500 - 2000 milligram per kilogram Method: OECD Test Guideline 401

calcium dodecylbenzenesulphonate:

Acute oral toxicity	:	LD50 (Rat, male and female): 1.300 mg/kg Remarks: Based on data from similar materials
Acute inhalation toxicity	:	Remarks: Not classified
Acute dermal toxicity	:	LD50 (Rat, male and female): > 2000 milligram per kilogram Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute dermal toxicity Remarks: Based on data from similar materials

2-ethylhexan-1-ol:

Acute oral toxicity	:	LD50 (Rat, male): 2.047 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): 4,3 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	:	LD50 (Rat, male and female): > 3.000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Causes skin irritation.

Product:

Method	:	OECD Test Guideline 404
Result	:	Skin irritation

Components:

PIPERIDINE, 1-(3-(4-(1,1-DIMETHYLETHYL)P:

Method	:	OECD Test Guideline 404

Result : Skin irritation

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Species : Rabbit
Assessment : Repeated exposure may cause skin dryness or cracking.

Result : No skin irritation
Remarks : Minimal effects that do not meet the threshold for classification.
Based on data from similar materials

Poly(oxy-1,2-ethanediyl), .alpha.-isotridecyl-.omega.-hydroxy-:

Species : Rabbit
Result : No skin irritation

calcium dodecylbenzenesulphonate:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Skin irritation

2-ethylhexan-1-ol:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Skin irritation

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Method : OECD Test Guideline 405
Result : Irreversible effects on the eye

Components:

PIPERIDINE, 1-(3-(4-(1,1-DIMETHYLETHYL)P:

Method : OECD Test Guideline 405
Result : Eye irritation

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Species : Rabbit
Assessment : No eye irritation
Remarks : Minimal effects that do not meet the threshold for classification.
Based on data from similar materials

Poly(oxy-1,2-ethanediyl), .alpha.-isotridecyl-.omega.-hydroxy-:

Species : Rabbit
Result : No eye irritation

calcium dodecylbenzenesulphonate:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Irreversible effects on the eye
Remarks	:	Based on data from similar materials

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Irreversible effects on the eye

2-ethylhexan-1-ol:

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

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.

Product:

Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitization.

Components:

PIPERIDINE, 1-(3-(4-(1,1-DIMETHYLETHYL)P:

Method	:	OECD Test Guideline 406
Result	:	Causes skin sensitization.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Test Type	:	Maximization Test
Species	:	Guinea pig
Result	:	Not a skin sensitizer.
Remarks	:	Based on data from similar materials

calcium dodecylbenzenesulphonate:

Test Type	:	Maximization Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Not a skin sensitizer.
Remarks	:	Based on data from similar materials

Germ cell mutagenicity

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

Components:

PIPERIDINE, 1-(3-(4-(1,1-DIMETHYLETHYL)P:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster ovary cells
Method: OECD Test Guideline 473
Result: negative

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

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 : Test Type: Bone marrow chromosome aberration.
Species: Rat
Application Route: inhalation (vapor)
Result: negative

calcium dodecylbenzenesulphonate:

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 : Test Type: chromosome aberration assay
Species: Rat (male and female)
Application Route: Oral
Exposure time: 90 d
Result: negative
Remarks: Based on data from similar materials

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

2-ethylhexan-1-ol:

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

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse
Application Route: Intraperitoneal injection
Result: negative

Carcinogenicity

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

Components:

PIPERIDINE, 1-(3-(4-(1,1-DIMETHYLETHYL)P:

Species	:	Rat
Method	:	OECD Test Guideline 453
Remarks	:	No significant adverse effects were reported

Species	:	Mouse
Method	:	OECD Test Guideline 451
Remarks	:	No significant adverse effects were reported

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Species	:	Rat, male and female
Application Route	:	inhalation (vapor)
Exposure time	:	12 month(s)
NOAEC	:	1,8 mg/l
Result	:	negative
Remarks	:	Based on data from similar materials

Carcinogenicity - Assessment	:	Not classifiable as a human carcinogen.

calcium dodecylbenzenesulphonate:

Species	:	Rat, male and female
Application Route	:	Oral
Exposure time	:	720 d
NOAEL	:	250 mg/kg body weight
Result	:	negative
Remarks	:	Based on data from similar materials

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

2-ethylhexan-1-ol:

Species	:	Rat
Application Route	:	Oral
Exposure time	:	24 month(s)
Result	:	negative

Reproductive toxicity

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

Components:

PIPERIDINE, 1-(3-(4-(1,1-DIMETHYLETHYL)P:

Effects on fertility	:	Method: OECD Test Guideline 416 Remarks: No significant adverse effects were reported

calcium dodecylbenzenesulphonate:

Effects on fertility : Test Type: Fertility/early embryonic development
Species: Rat, male and female
Application Route: Ingestion
General Toxicity Parent: NOAEL: 400 mg/kg body weight
Method: OECD Test Guideline 422
Result: negative

Effects on fetal development : Test Type: reproductive and developmental toxicity study
Species: Rat
Application Route: Ingestion
General Toxicity Maternal: NOAEL: 300 mg/kg body weight
Developmental Toxicity: NOAEL: 600 mg/kg body weight
Method: OECD Test Guideline 422
Result: negative

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

2-ethylhexan-1-ol:

Effects on fetal development : Test Type: Embryo-fetal development
Species: Mouse
Application Route: Oral
Method: OECD Test Guideline 414
Result: negative

STOT-single exposure

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

Components:

PIPERIDINE, 1-(3-(4-(1,1-DIMETHYLETHYL)P:

Remarks : No significant adverse effects were reported

2-ethylhexan-1-ol:

Assessment : May cause respiratory irritation.

STOT-repeated exposure

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

Components:

PIPERIDINE, 1-(3-(4-(1,1-DIMETHYLETHYL)P:

Remarks : No significant adverse effects were reported

Repeated dose toxicity

Components:

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Species	:	Rat, male and female
NOAEC	:	0,9 - 1,8 mg/l
Application Route	:	inhalation (vapor)
Exposure time	:	12 Months

calcium dodecylbenzenesulphonate:

Species	:	Rat, male and female
NOAEL	:	85 mg/kg
LOAEL	:	145 mg/kg
Application Route	:	Oral
Exposure time	:	9 Months
Remarks	:	Based on data from similar materials

Species	:	Rat, male
LOAEL	:	286 mg/kg
Application Route	:	Skin contact
Exposure time	:	15 Days
Remarks	:	Based on data from similar materials

Species	:	Rat, male and female
NOAEL	:	100 mg/kg bw/day
LOAEL	:	200 mg/kg bw/day
Application Route	:	Oral - gavage
Exposure time	:	28 - 54 Days
Method	:	OECD Test Guideline 422
Remarks	:	Based on data from similar materials

2-ethylhexan-1-ol:

Species	:	Rat
	:	250 mg/kg
Application Route	:	Oral
Exposure time	:	13 Weeks
Method	:	OECD Test Guideline 408

Aspiration toxicity

May be fatal if swallowed and enters airways.

Product:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Components:

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

May be fatal if swallowed and enters airways.

Experience with human exposure

Product:

Skin contact	:	Remarks: Prolonged skin contact may defat the skin and produce dermatitis.

Components:

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Skin contact : Symptoms: Repeated exposure may cause skin dryness or cracking.

Further information

Product:

Remarks : Solvents may degrease the skin.

Components:

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Remarks : Vapour concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects. Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

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

Components:

PIPERIDINE, 1-(3-(4-(1,1-DIMETHYLETHYL)P:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1,93 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,54 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : IC50 (Scenedesmus subspicatus): 0,0057 mg/l
Exposure time: 96 h

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic tox- : NOEC: 0,32 mg/l

icity)		Exposure time: 21 d Species: Oncorhynchus mykiss (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,32 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)
Toxicity to soil dwelling organisms	:	LC50: > 1.000 mg/kg Species: Eisenia fetida (earthworms)
Toxicity to terrestrial organisms	:	LD50: 1.899 mg/kg Species: Anas platyrhynchos (Mallard duck) LD50: >10 Exposure time: 48 h End point: Acute oral toxicity Species: Apis mellifera (bees) LD50: 46 Exposure time: 48 h End point: Acute contact toxicity Species: Apis mellifera (bees)

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Toxicity to fish	:	LL50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EL50 (Daphnia magna (Water flea)): 1,4 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EL50 (Pseudokirchneriella subcapitata (green algae)): 1 - 3 mg/l Exposure time: 24 h Method: OECD Test Guideline 201
Toxicity to microorganisms	:	LL50 (Tetrahymena pyriformis): 677,9 mg/l Exposure time: 72 h Test Type: Growth inhibition
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	EL50: 0,89 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

Poly(oxy-1,2-ethanediyl), .alpha.-isotridecyl-.omega.-hydroxy-:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): > 10 - 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to microorganisms	:	EC50 (Pseudomonas putida): > 1 mg/l Method: DIN 38 412 Part 8

calcium dodecylbenzenesulphonate:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 10 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 Remarks: Based on data from similar materials LC50 (Pimephales promelas (fathead minnow)): 4,6 mg/l Exposure time: 96 h Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 3,5 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 Remarks: Based on data from similar materials
Toxicity to algae/aquatic plants	:	NOEC (Pseudokirchneriella subcapitata (green algae)): 7,9 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: Based on data from similar materials EC50 (Pseudokirchneriella subcapitata (green algae)): 65,4 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: Based on data from similar materials
Toxicity to microorganisms	:	EC50 (activated sludge): 500 mg/l Exposure time: 3 h Method: OECD Test Guideline 209
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 1,65 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Remarks: Based on data from similar materials NOEC: 1,18 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Remarks: Based on data from similar materials
Toxicity to soil dwelling organisms	:	LC50: 1.000 mg/kg Exposure time: 14 d Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207
Toxicity to terrestrial organisms	:	LD50: 1.356 mg/kg Exposure time: 14 d Species: Colinus virginianus (Bobwhite quail) Method: OECD Test Guideline 223

2-ethylhexan-1-ol:

Toxicity to fish	:	LC50 (Leuciscus idus (Golden orfe)): 17,1 - 28,2 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 39 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC10 (Desmodesmus subspicatus (green algae)): 3,2 mg/l Exposure time: 72 h
		EC50 (Desmodesmus subspicatus (green algae)): 11,5 mg/l Exposure time: 72 h
Toxicity to microorganisms	:	EC50 (Anabaena flos-aquae (cyanobacterium)): 16,6 mg/l Exposure time: 72 h

Persistence and degradability

Components:

PIPERIDINE, 1-(3-(4-(1,1-DIMETHYLETHYL)P:

Biodegradability	:	Result: Biodegradable

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: 58,6 % Exposure time: 28 d Method: OECD Test Guideline 301F Remarks: Based on data from similar materials

Poly(oxy-1,2-ethanediyl), .alpha.-isotridecyl-.omega.-hydroxy-:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: > 80 % Exposure time: 10 d Method: OECD Test Guideline 302B

calcium dodecylbenzenesulphonate:

Biodegradability	:	Result: Readily biodegradable. Method: OECD Test Guideline 301E

2-ethylhexan-1-ol:

Biodegradability	:	Result: Readily biodegradable.

Bioaccumulative potential

Product:

Bioaccumulation	:	Remarks: No data available

Components:

PIPERIDINE, 1-(3-(4-(1,1-DIMETHYLETHYL)P:

Bioaccumulation	:	Species: Lepomis macrochirus (Bluegill sunfish) Bioconcentration factor (BCF): 163
Partition coefficient: n-octanol/water	:	log Pow: 2,59 (22 °C) pH: 7

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Bioaccumulation	:	Remarks: The product/substance has a potential to bioaccumulate.
Partition coefficient: n-octanol/water	:	log Pow: 3,72 Method: QSAR

Poly(oxy-1,2-ethanediyl), .alpha.-isotridecyl-.omega.-hydroxy-:

Partition coefficient: n-octanol/water	:	log Pow: 0,85

calcium dodecylbenzenesulphonate:

Bioaccumulation	:	Species: Fish Bioconcentration factor (BCF): 70,79 Method: QSAR
Partition coefficient: n-octanol/water	:	log Pow: 4,77 (25 °C)

2-ethylhexan-1-ol:

Partition coefficient: n-octanol/water	:	log Pow: 2,9 (25 °C)

Mobility in soil

Components:

PIPERIDINE, 1-(3-(4-(1,1-DIMETHYLETHYL)P:

Distribution among environmental compartments	:	Medium: Soil Remarks: immobile

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Distribution among environmental compartments	:	Remarks: Expected to partition to sediment and wastewater solids. Moderately volatile.

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.

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. (FENPROPIDIN)

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. (FENPROPIDIN)

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. (FENPROPIDIN)

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

Organic Law on Integral Prevention of Social and Economic Phenomenon of Drugs and of Regulation and Use Control of Listed Substances subject to Monitoring : 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.

PIPERIDINE, 1-(3-(4-(1,1-DIMETHYLETHYL)P

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	:	28.01.2025
Date format	:	dd.mm.yyyy

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH / TWA	:	8-hour, 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

Disclaimer

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. You can contact FMC Corporation to insure that this document is the most current available from FMC Corporation. No warranty of fitness for any particular purpose, warranty of merchantability or any other warranty, expressed or implied, is made concerning the information provided herein. The information provided herein re-

lates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. The user is responsible for determining whether the product is fit for a particular purpose and suitable for the user's conditions and methods of use. Since the conditions and methods of use are beyond the control of FMC Corporation, FMC Corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

EC / EN