SAFETY DATA SHEET
according to the Globally Harmonized System

FENOVA®

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	08.04.2025	50000614	Date of first issue: 08.04.2025

1. IDENTIFICATION

Product name : FENOVA®

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)
0086-0532 8388 9090 (National Registration Center for Chemicals)

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
86 532 8388 9090

Recommended use of the chemical and restrictions on use

Recommended use : Herbicide

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 sensitization : Sub-category 1B

Specific target organ toxicity - : Category 2

repeated exposure

Short-term (acute) aquatic hazard : Category 2

Long-term (chronic) aquatic hazard : Category 2

GHS label elements

Hazard pictograms :

Signal Word : WARNING

Hazard Statements : H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.
H317 May cause an allergic skin reaction.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements :

Prevention:

P260 Do not breathe 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.
P272 Contaminated work clothing should not be allowed out of the workplace.
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.
P319 Get medical help if you feel unwell.
P333 + P317 If skin irritation or rash occurs: 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 if swallowed, in contact with skin or if inhaled.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified	64742-94-5	>= 50 - < 70
Alcohols, C9-11-ethoxylated	68439-46-3	>= 10 - < 20
fenoxaprop-P-ethyl (ISO)	71283-80-2	>= 10 - < 20
glycerol	56-81-5	>= 1 - < 10
1,2-benzisothiazol-3(2H)-one	2634-33-5	>= 0,025 - < 0,1
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified	64742-94-5	>= 50 - < 70
Alcohols, C9-11-ethoxylated	68439-46-3	>= 10 - < 20
fenoxaprop-P-ethyl (ISO)	71283-80-2	>= 10 - < 20
glycerol	56-81-5	>= 1 - < 10
1,2-benzisothiazol-3(2H)-one	2634-33-5	>= 0,025 - < 0,1

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 : 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 : Induce vomiting immediately and call a physician.
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.
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 cause an allergic skin reaction.
May cause damage to organs through prolonged or repeated exposure.
Exposure to skin may result in mild symptoms include itching, hives or rash, and skin redness. More severe symptoms include sneezing, itchy watery eyes, and difficulty breathing.

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 chloride
Chlorine 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.
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.
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.
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 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 sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Conditions for safe storage : Prevent unauthorized access.
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 conditions : Protect against strong heat from sunshine or other source, e.g. fire.
Store 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. A warning sign reading “POISON” is recommended. 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.

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
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified	64742-94-5	TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
glycerol	56-81-5	TWA (Mist)	10 mg/m3	PE OEL
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified	64742-94-5	TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
glycerol	56-81-5	TWA (Mist)	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
Face-shield

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	:	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	:	white
Odor	:	Aromatic hydrocarbon
Odor Threshold	:	No data available
pH	:	5,08 Concentration: 1 %
Melting point/freezing point	:	< 0 °C
Boiling point/boiling range	:	not determined
Flash point	:	> 95 °C Method: Pensky-Martens closed cup
Evaporation rate	:	No data available
Flammability (liquids)	:	ignitable, Based on available information, the classification criteria for flammability hazard are not met.
Self-ignition	:	> 400 °C
Upper explosion limit / Upper flammability limit	:	Not available for this mixture.
Lower explosion limit / Lower flammability limit	:	Not available for this mixture.
Vapor pressure	:	Not available for this mixture.
Relative vapor density	:	Not available for this mixture.
Relative density	:	1,0249 (20 °C)

Density	:	No data available
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	:	1.777 mPa.s (20 °C)
Viscosity, kinematic	:	1734 mm2/s (20 °C)
		784 mm2/s (40 °C)
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	:	Heat, flames and sparks. Protect from frost. 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): > 2.000 mg/kg
Method: OECD Test Guideline 401
Remarks: Based on data from similar materials

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

Acute inhalation toxicity : LC50(Rat): > 2,09 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Highest attainable concentration.
Based on data from similar materials

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

Acute dermal toxicity : LD50(Rat): > 2.000 mg/kg
Method: OECD Test Guideline 402
Remarks: Based on data from similar materials

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

Components:

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

Alcohols, C9-11-ethoxylated:

Acute oral toxicity : LD50 (Rat): 1.192 mg/kg

Acute inhalation toxicity : Remarks: No data available

fenoxaprop-P-ethyl (ISO):

Acute oral toxicity : LD50 (Rat): 3.150 - 4.000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 1,224 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

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg
Method: EPA OPP 81-2
Assessment: The substance or mixture has no acute dermal toxicity

glycerol:

Acute oral toxicity : LD50 (Rat, female): 11.500 mg/kg

Acute inhalation toxicity : LC0 (Rat, male): 11 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Guinea pig, male and female): 56.750 mg/kg

1,2-benzisothiazol-3(2H)-one:

Acute oral toxicity : LD50 (Rat, male and female): 490 mg/kg
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

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

Alcohols, C9-11-ethoxylated:

Acute oral toxicity : LD50 (Rat): 1.192 mg/kg

Acute inhalation toxicity : Remarks: No data available

fenoxaprop-P-ethyl (ISO):

Acute oral toxicity : LD50 (Rat): 3.150 - 4.000 mg/kg
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Acute inhalation toxicity : LC50 (Rat): > 1,224 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

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg
Method: EPA OPP 81-2
Assessment: The substance or mixture has no acute dermal toxicity

glycerol:

Acute oral toxicity : LD50 (Rat, female): 11.500 mg/kg

Acute inhalation toxicity : LC0 (Rat, male): 11 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Guinea pig, male and female): 56.750 mg/kg

1,2-benzisothiazol-3(2H)-one:

Acute oral toxicity : LD50 (Rat, male and female): 490 mg/kg
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

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

Product:

Method	:	OECD Test Guideline 404
Result	:	No skin irritation
Remarks	:	Based on data from similar materials Repeated exposure may cause skin dryness or cracking.
Remarks	:	May cause skin irritation and/or dermatitis.

Components:

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

Alcohols, C9-11-ethoxylated:

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

fenoxaprop-P-ethyl (ISO):

Assessment	:	No skin irritation
Method	:	EPA OPP 81-5
Remarks	:	Minimal effects that do not meet the threshold for classification.

glycerol:

Species	:	Rabbit
Result	:	No skin irritation

1,2-benzisothiazol-3(2H)-one:

Species	:	Rabbit
Exposure time	:	72 h
Method	:	OECD Test Guideline 404
Result	:	No 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 classifica-

tion.
Based on data from similar materials

Alcohols, C9-11-ethoxylated:

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

fenoxaprop-P-ethyl (ISO):

Assessment	:	No skin irritation
Method	:	EPA OPP 81-5
Remarks	:	Minimal effects that do not meet the threshold for classification.

glycerol:

Species	:	Rabbit
Result	:	No skin irritation

1,2-benzisothiazol-3(2H)-one:

Species	:	Rabbit
Exposure time	:	72 h
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Serious eye damage/eye irritation

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

Product:

Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405
Remarks	:	Slight irritation and redness may be possible. Based on data from similar materials
Remarks	:	Vapors may cause irritation to the eyes, respiratory system and the skin.

Components:

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

Alcohols, C9-11-ethoxylated:

Species	:	Bovine cornea
Result	:	Eye irritation
Remarks	:	Based on data from similar materials

fenoxaprop-P-ethyl (ISO):

Assessment	:	No eye irritation
Method	:	EPA OPP 81-4
Remarks	:	Minimal effects that do not meet the threshold for classification.
Remarks	:	Product dust may be irritating to eyes, skin and respiratory system.

glycerol:

Species	:	Rabbit
Result	:	No eye irritation

1,2-benzisothiazol-3(2H)-one:

Species	:	Bovine cornea
Method	:	OECD Test Guideline 437
Result	:	No eye irritation
Species	:	Rabbit
Method	:	EPA OPP 81-4
Result	:	Irreversible effects on the eye

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

Alcohols, C9-11-ethoxylated:

Species	:	Bovine cornea
Result	:	Eye irritation
Remarks	:	Based on data from similar materials

fenoxaprop-P-ethyl (ISO):

Assessment	:	No eye irritation
Method	:	EPA OPP 81-4
Remarks	:	Minimal effects that do not meet the threshold for classification.
Remarks	:	Product dust may be irritating to eyes, skin and respiratory system.

glycerol:

Species : Rabbit
Result : No eye irritation

1,2-benzisothiazol-3(2H)-one:

Species : Bovine cornea
Method : OECD Test Guideline 437
Result : No eye irritation

Species : Rabbit
Method : EPA OPP 81-4
Result : Irreversible effects on the eye

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

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

Product:

Test Type : Local lymph node test
Method : OECD Test Guideline 429
Result : Probability or evidence of low to moderate skin sensitization rate in humans

Remarks : Causes sensitization.

Components:

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

Alcohols, C9-11-ethoxylated:

Test Type : Maximization Test
Species : Guinea pig
Result : Does not cause skin sensitization.
Remarks : Based on data from similar materials

fenoxaprop-P-ethyl (ISO):

Method : EPA OPP 81-6
Result : May cause sensitization by skin contact.

1,2-benzisothiazol-3(2H)-one:

Test Type : Maximization Test
Species : Guinea pig

Method	:	OECD Test Guideline 406
Result	:	May cause sensitization by skin contact.
Species	:	Guinea pig
Method	:	FIFRA 81.06
Result	:	May cause sensitization by skin contact.

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

Alcohols, C9-11-ethoxylated:

Test Type	:	Maximization Test
Species	:	Guinea pig
Result	:	Does not cause skin sensitization.
Remarks	:	Based on data from similar materials

fenoxaprop-P-ethyl (ISO):

Method	:	EPA OPP 81-6
Result	:	May cause sensitization by skin contact.

1,2-benzisothiazol-3(2H)-one:

Test Type	:	Maximization Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	May cause sensitization by skin contact.
Species	:	Guinea pig
Method	:	FIFRA 81.06
Result	:	May cause sensitization by skin contact.

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:

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

Alcohols, C9-11-ethoxylated:

Genotoxicity in vitro : Test Type: reverse mutation assay
Method: OECD Test Guideline 471
Result: negative
Remarks: Based on data from similar materials

Test Type: Chromosome aberration test in vitro
Result: negative
Remarks: Based on data from similar materials

Test Type: In vitro mammalian cell gene mutation test
Result: negative
Remarks: Based on data from similar materials

Germ cell mutagenicity - Assessment : In vitro tests did not show mutagenic effects

glycerol:

Genotoxicity in vitro : Test Type: reverse mutation assay
Result: negative

1,2-benzisothiazol-3(2H)-one:

Genotoxicity in vitro : Test Type: gene mutation test
Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Test Type: Ames test
Method: OECD Test Guideline 471
Result: negative

Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: positive

Genotoxicity in vivo : Test Type: unscheduled DNA synthesis assay
Species: Rat (male)
Cell type: Liver cells
Application Route: Ingestion
Exposure time: 4 h
Method: OECD Test Guideline 486
Result: negative

Test Type: Micronucleus test
Species: Mouse
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.

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

Alcohols, C9-11-ethoxylated:

Genotoxicity in vitro : Test Type: reverse mutation assay
Method: OECD Test Guideline 471
Result: negative
Remarks: Based on data from similar materials

Test Type: Chromosome aberration test in vitro
Result: negative
Remarks: Based on data from similar materials

Test Type: In vitro mammalian cell gene mutation test
Result: negative
Remarks: Based on data from similar materials

Germ cell mutagenicity - Assessment : In vitro tests did not show mutagenic effects

glycerol:

Genotoxicity in vitro : Test Type: reverse mutation assay
Result: negative

1,2-benzisothiazol-3(2H)-one:

Genotoxicity in vitro : Test Type: gene mutation test
Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Test Type: Ames test
Method: OECD Test Guideline 471
Result: negative

Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473
Result: positive

Genotoxicity in vivo : Test Type: unscheduled DNA synthesis assay
Species: Rat (male)
Cell type: Liver cells
Application Route: Ingestion
Exposure time: 4 h
Method: OECD Test Guideline 486
Result: negative

Test Type: Micronucleus test
Species: Mouse
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

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

Product:

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

Components:

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.

glycerol:

Species : Rat
Application Route : Oral
Exposure time : 2 years Years
Result : negative

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.

glycerol:

Species	:	Rat
Application Route	:	Oral
Exposure time	:	2 years Years
Result	:	negative

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:

Alcohols, C9-11-ethoxylated:

Effects on fertility	:	Test Type: Two-generation study Species: Rat, male and female Application Route: Dermal Dose: 0, 10, 100, 250 mg/kg bw General Toxicity Parent: NOAEL: >= 250 mg/kg bw/day Result: negative
Effects on fetal development	:	Test Type: reproductive and developmental toxicity study Species: Rat Application Route: Dermal Dose: 0, 10, 100, 250 mg/kg bw General Toxicity Maternal: NOAEL: >= 250 mg/kg bw/day Developmental Toxicity: NOAEL: >= 250 mg/kg bw/day Result: negative
Reproductive toxicity - Assessment	:	Weight of evidence does not support classification for reproductive toxicity

glycerol:

Effects on fertility	:	Test Type: Two-generation study Species: Rat Application Route: Oral Result: negative
Effects on fetal development	:	Test Type: Two-generation study

Species: Rat
Application Route: Oral
Result: negative

1,2-benzisothiazol-3(2H)-one:

Effects on fertility : Species: Rat, male
Application Route: Ingestion
General Toxicity Parent: NOAEL: 18,5 mg/kg body weight
General Toxicity F1: NOAEL: 48 mg/kg body weight
Fertility: NOAEL: 112 mg/kg bw/day
Symptoms: No effects on reproduction parameters.
Method: OPPTS 870.3800
Result: negative

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

Alcohols, C9-11-ethoxylated:

Effects on fertility : Test Type: Two-generation study
Species: Rat, male and female
Application Route: Dermal
Dose: 0, 10, 100, 250 mg/kg bw
General Toxicity Parent: NOAEL: >= 250 mg/kg bw/day
Result: negative

Effects on fetal development : Test Type: reproductive and developmental toxicity study
Species: Rat
Application Route: Dermal
Dose: 0, 10, 100, 250 mg/kg bw
General Toxicity Maternal: NOAEL: >= 250 mg/kg bw/day
Developmental Toxicity: NOAEL: >= 250 mg/kg bw/day
Result: negative

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

glycerol:

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

Effects on fetal development : Test Type: Two-generation study
Species: Rat
Application Route: Oral
Result: negative

1,2-benzisothiazol-3(2H)-one:

Effects on fertility : Species: Rat, male
Application Route: Ingestion

General Toxicity Parent: NOAEL: 18,5 mg/kg body weight
General Toxicity F1: NOAEL: 48 mg/kg body weight
Fertility: NOAEL: 112 mg/kg bw/day
Symptoms: No effects on reproduction parameters.
Method: OPPTS 870.3800
Result: negative

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.

Product:

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

Components:

Alcohols, C9-11-ethoxylated:

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

Alcohols, C9-11-ethoxylated:

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

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:

fenoxaprop-P-ethyl (ISO):

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

1,2-benzisothiazol-3(2H)-one:

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

fenoxaprop-P-ethyl (ISO):

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

1,2-benzisothiazol-3(2H)-one:

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

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

Alcohols, C9-11-ethoxylated:

Species	:	Rat, male and female
NOAEL	:	>=500 mg/kg bw/day
Application Route	:	Ingestion
Exposure time	:	90 d
Dose	:	0, 15, 50, 150, 500 mg/kg bw/d
Remarks	:	Based on data from similar materials

fenoxaprop-P-ethyl (ISO):

Species	:	Rat
NOAEL	:	0,7 mg/kg
Application Route	:	Ingestion
Exposure time	:	90 d
Symptoms	:	Increased kidneys weight, increased liver weight

glycerol:

Species	:	Rat
LOAEL	:	1 mg/kg
Application Route	:	Inhalation
Exposure time	:	14 d
Dose	:	0, 1, 1.93, 3.91 mg/L
Symptoms	:	respiratory tract irritation, Fatality

Species	:	Rat
NOAEL	:	0,165 mg/l
LOAEL	:	0,662 mg/l
Application Route	:	Inhalation
Exposure time	:	13 w
Dose	:	0, 0.033, 0.165, 0.662 mg/L
Symptoms	:	respiratory tract irritation

1,2-benzisothiazol-3(2H)-one:

Species	:	Rat, male and female
NOAEL	:	15 mg/kg
Application Route	:	Ingestion

Exposure time	:	28 d
Method	:	OECD Test Guideline 407
Symptoms	:	Irritation

Species	:	Rat, male and female
NOAEL	:	69 mg/kg
Application Route	:	Ingestion
Exposure time	:	90 d
Symptoms	:	Irritation, Reduced body weight

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

Alcohols, C9-11-ethoxylated:

Species	:	Rat, male and female
NOAEL	:	>=500 mg/kg bw/day
Application Route	:	Ingestion
Exposure time	:	90 d
Dose	:	0, 15, 50, 150, 500 mg/kg bw/d
Remarks	:	Based on data from similar materials

fenoxaprop-P-ethyl (ISO):

Species	:	Rat
NOAEL	:	0,7 mg/kg
Application Route	:	Ingestion
Exposure time	:	90 d
Symptoms	:	Increased kidneys weight, increased liver weight

glycerol:

Species	:	Rat
LOAEL	:	1 mg/kg
Application Route	:	Inhalation
Exposure time	:	14 d
Dose	:	0, 1, 1.93, 3.91 mg/L
Symptoms	:	respiratory tract irritation, Fatality

Species	:	Rat
NOAEL	:	0,165 mg/l
LOAEL	:	0,662 mg/l
Application Route	:	Inhalation
Exposure time	:	13 w
Dose	:	0, 0.033, 0.165, 0.662 mg/L
Symptoms	:	respiratory tract irritation

1,2-benzisothiazol-3(2H)-one:

Species	:	Rat, male and female

NOAEL	:	15 mg/kg
Application Route	:	Ingestion
Exposure time	:	28 d
Method	:	OECD Test Guideline 407
Symptoms	:	Irritation
Species	:	Rat, male and female
NOAEL	:	69 mg/kg
Application Route	:	Ingestion
Exposure time	:	90 d
Symptoms	:	Irritation, Reduced body weight

Aspiration toxicity

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

Product:

No aspiration toxicity classification

Components:

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

May be fatal if swallowed and enters airways.

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

May be fatal if swallowed and enters airways.

Experience with human exposure

Components:

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

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

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

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

Further information

Product:

Remarks	:	No data available
Remarks	:	No data available

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.

fenoxaprop-P-ethyl (ISO):

Remarks : No data available

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.

fenoxaprop-P-ethyl (ISO):

Remarks : No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1,62 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1,46 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Selenastrum capricornutum (green algae)): 3,28 mg/l
Exposure time: 96 h

Toxicity to terrestrial organisms : LD50: 160 µg/bee
Exposure time: 48 h
End point: Acute contact toxicity
Species: Apis mellifera (bees)

LD50: 327 µg/bee
Exposure time: 48 h
End point: Acute oral toxicity
Species: Apis mellifera (bees)

Components:

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

Alcohols, C9-11-ethoxylated:

Toxicity to fish	:	Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: No data available
Toxicity to algae/aquatic plants	:	Remarks: No data available

fenoxaprop-P-ethyl (ISO):

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 0,31 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 0,97 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	IC50 (Desmodesmus subspicatus (green algae)): 0,51 mg/l Exposure time: 72 h EC50 (Lemna gibba (duckweed)): 0,039 mg/l Exposure time: 14 d
M-Factor (Acute aquatic toxicity)	:	1

Toxicity to fish (Chronic toxicity)	:	NOEC: 0,076 mg/l Exposure time: 21 d Species: Oncorhynchus mykiss (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,16 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)
M-Factor (Chronic aquatic toxicity)	:	1
Toxicity to soil dwelling organisms	:	LC50: 24,8 mg/kg Exposure time: 14 d Species: Eisenia fetida (earthworms)
Toxicity to terrestrial organisms	:	LD50: > 2.000 mg/kg Species: Colinus virginianus (Bobwhite quail) LD50: > 2.000 mg/kg Species: Anas platyrhynchos (Mallard duck) LD50: > 100 µg/bee Exposure time: 48 h Species: Apis mellifera (bees)

glycerol:

Toxicity to fish	:	LC50 (Fish): 885 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 1.955 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Scenedesmus capricornutum (fresh water algae)): 2.900 mg/l Exposure time: 192 h
Toxicity to microorganisms	:	EC10 (Pseudomonas putida): 10.000 mg/l Exposure time: 16 h

1,2-benzisothiazol-3(2H)-one:

Toxicity to fish	:	LC50 (Cyprinodon variegatus (sheepshead minnow)): 16,7 mg/l Exposure time: 96 h Test Type: static test LC50 (Oncorhynchus mykiss (rainbow trout)): 2,15 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 2,9 mg/l Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 0,070 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 0,04 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 10

Toxicity to microorganisms : EC50 (activated sludge): 24 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition
Method: OECD Test Guideline 209

EC50 (activated sludge): 12,8 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition
Method: OECD Test Guideline 209

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

Alcohols, C9-11-ethoxylated:

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other : Remarks: No data available

aquatic invertebrates

Toxicity to algae/aquatic plants : Remarks: No data available

fenoxaprop-P-ethyl (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,31 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 0,97 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : IC50 (Desmodesmus subspicatus (green algae)): 0,51 mg/l
Exposure time: 72 h

EC50 (Lemna gibba (duckweed)): 0,039 mg/l
Exposure time: 14 d

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC: 0,076 mg/l
Exposure time: 21 d
Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,16 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic toxicity) : 1

Toxicity to soil dwelling organisms : LC50: 24,8 mg/kg
Exposure time: 14 d
Species: Eisenia fetida (earthworms)

Toxicity to terrestrial organisms : LD50: > 2.000 mg/kg
Species: Colinus virginianus (Bobwhite quail)

LD50: > 2.000 mg/kg
Species: Anas platyrhynchos (Mallard duck)

LD50: > 100 µg/bee
Exposure time: 48 h
Species: Apis mellifera (bees)

glycerol:

Toxicity to fish : LC50 (Fish): 885 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.955 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants	:	EC50 (Scenedesmus capricornutum (fresh water algae)): 2.900 mg/l Exposure time: 192 h
Toxicity to microorganisms	:	EC10 (Pseudomonas putida): 10.000 mg/l Exposure time: 16 h

1,2-benzisothiazol-3(2H)-one:

Toxicity to fish	:	LC50 (Cyprinodon variegatus (sheepshead minnow)): 16,7 mg/l Exposure time: 96 h Test Type: static test LC50 (Oncorhynchus mykiss (rainbow trout)): 2,15 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 2,9 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 0,070 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (Pseudokirchneriella subcapitata (green algae)): 0,04 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	:	10
Toxicity to microorganisms	:	EC50 (activated sludge): 24 mg/l Exposure time: 3 h Test Type: Respiration inhibition Method: OECD Test Guideline 209 EC50 (activated sludge): 12,8 mg/l Exposure time: 3 h Test Type: Respiration inhibition Method: OECD Test Guideline 209

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:

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

Alcohols, C9-11-ethoxylated:

Biodegradability : Inoculum: activated sludge, non-adapted
Result: Readily biodegradable.
Biodegradation: 100 %
Exposure time: 28 d
Remarks: Based on data from similar materials

fenoxaprop-P-ethyl (ISO):

Biodegradability : Result: Not readily biodegradable.

glycerol:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 94 %
Exposure time: 24 h

1,2-benzisothiazol-3(2H)-one:

Biodegradability : Result: rapidly biodegradable
Method: OECD Test Guideline 301C

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

Alcohols, C9-11-ethoxylated:

Biodegradability : Inoculum: activated sludge, non-adapted
Result: Readily biodegradable.
Biodegradation: 100 %
Exposure time: 28 d
Remarks: Based on data from similar materials

fenoxaprop-P-ethyl (ISO):

Biodegradability : Result: Not readily biodegradable.

glycerol:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 94 %
Exposure time: 24 h

1,2-benzisothiazol-3(2H)-one:

Biodegradability : Result: rapidly biodegradable
Method: OECD Test Guideline 301C

Bioaccumulative potential

Product:

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

Remarks: No data available

Components:

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

Alcohols, C9-11-ethoxylated:

Bioaccumulation : Species: Pimephales promelas (fathead minnow)
Bioconcentration factor (BCF): 237
Remarks: Based on data from similar materials

Partition coefficient: n-octanol/water : log Pow: 3,74 (25 °C)
Method: QSAR

fenoxaprop-P-ethyl (ISO):

Partition coefficient: n-octanol/water : log Pow: 4,28

glycerol:

Partition coefficient: n-octanol/water : log Pow: -1,75 (25 °C)
pH: 7,4

1,2-benzisothiazol-3(2H)-one:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Exposure time: 56 d
Bioconcentration factor (BCF): 6,62
Method: OECD Test Guideline 305
Remarks: Substance is not persistent, bioaccumulative, and toxic (PBT).

Partition coefficient: n-octanol/water	:	log Pow: 0,7 (20 °C) pH: 7 log Pow: 0,99 (20 °C) pH: 5

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

Alcohols, C9-11-ethoxylated:

Bioaccumulation	:	Species: Pimephales promelas (fathead minnow) Bioconcentration factor (BCF): 237 Remarks: Based on data from similar materials
Partition coefficient: n-octanol/water	:	log Pow: 3,74 (25 °C) Method: QSAR

fenoxaprop-P-ethyl (ISO):

Partition coefficient: n-octanol/water	:	log Pow: 4,28

glycerol:

Partition coefficient: n-octanol/water	:	log Pow: -1,75 (25 °C) pH: 7,4

1,2-benzisothiazol-3(2H)-one:

Bioaccumulation	:	Species: Lepomis macrochirus (Bluegill sunfish) Exposure time: 56 d Bioconcentration factor (BCF): 6,62 Method: OECD Test Guideline 305 Remarks: Substance is not persistent, bioaccumulative, and toxic (PBT).
Partition coefficient: n-octanol/water	:	log Pow: 0,7 (20 °C) pH: 7 log Pow: 0,99 (20 °C) pH: 5

Mobility in soil

Product:

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

Components:

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

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

1,2-benzisothiazol-3(2H)-one:

Distribution among environmental compartments : Koc: 9,33 ml/g, log Koc: 0,97
Method: OECD Test Guideline 121
Remarks: Highly mobile in soils

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

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

1,2-benzisothiazol-3(2H)-one:

Distribution among environmental compartments : Koc: 9,33 ml/g, log Koc: 0,97
Method: OECD Test Guideline 121
Remarks: Highly mobile in soils

Other adverse effects

Product:

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

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

Components:

fenoxaprop-P-ethyl (ISO):

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.

fenoxaprop-P-ethyl (ISO):

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. (Fenoxaprop-P-ethyl, Aromatic hydrocarbons)
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. (Fenoxaprop-P-ethyl, Aromatic hydrocarbons)
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. (Fenoxaprop-P-ethyl, Aromatic hydrocarbons)

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

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. fenoxaprop-P-ethyl (ISO)
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	On the inventory, or 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
NZIoC	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

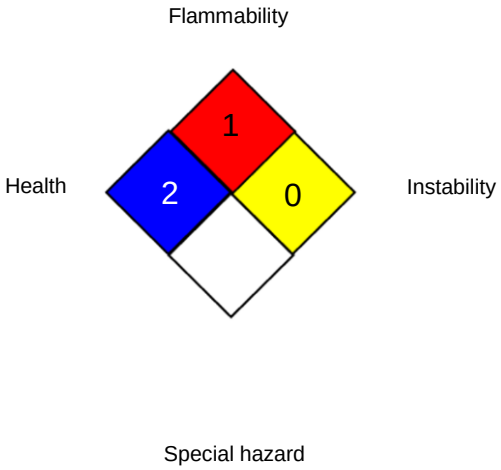
16. OTHER INFORMATION

Revision Date : 08.04.2025

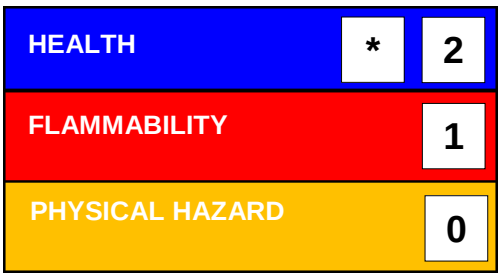
Date format : dd.mm.yyyy

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 Con-

centration 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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