SAFETY DATA SHEET

FOXTROT® EXTRA

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	27.06.2024	50000654	Date of first issue: 27.06.2024

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : FOXTROT® EXTRA

Manufacturer or supplier's details

Company : FMC Agro Kazakhstan LLP

Address : str. Timiryazeva, 26/29
050040 Almaty
Kazakhstan

Telephone : 1 215 / 299-6000 (Corporate office in USA)

Emergency telephone number : +44 20 3885 0382 (CHEMTREC's European Regional Toll-Free Number)
1 703 / 741-5970 (CHEMTREC - International)
1 703 / 527-3887 (CHEMTREC - Alternate)

Medical Emergency Number : All other countries: +1 651 / 632-6793 (Collect)

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

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 5

Skin irritation : Category 3

Serious eye damage : Category 1

Skin sensitisation : Category 1

Aspiration hazard : Category 1

Short-term (acute) aquatic hazard : Category 2

Long-term (chronic) aquatic hazard : Category 2

GHS-Labelling

Hazard pictograms :

Signal word : Danger

Hazard statements : H303 May be harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H316 Causes mild skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements :

Prevention:

P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P331 Do NOT induce vomiting.
P391 Collect spillage.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Components

Chemical name	CAS-No.	Classification	MAC value mg/m3 / TSEL value	Concentration (% w/w)
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified	64742-94-5	Asp. Tox.1; H304 Aquatic Acute2; H401	No data available	>= 50 - < 70
Alcohols, C9-11, ethoxylated	68439-46-3	Acute Tox.4; H302 Eye Irrit.2A; H319	No data available	>= 10 - < 20
γ-butyrolactone	96-48-0	Acute Tox.4; H302 Eye Dam.1; H318 STOT SE3; H336	MPC-STEL: 2 mg/m3 Class 3 - Moderately dangerous Data Source: KZ OEL	>= 10 - < 20

		(Central nervous system) Aquatic Acute3; H402	MPC-STEL: 2 mg/m3 Class 3 - Moderately dangerous Data Source: RU OEL	
fenoxaprop-P-ethyl (ISO)	71283-80-2	Acute Tox.5; H303 Skin Sens.1; H317 STOT RE2; H373 Aquatic Acute1; H400 Aquatic Chronic1; H410	No data available	>= 2,5 - < 10
clodinafop-propargyl (ISO)	105512-06-9	Acute Tox.4; H302 Acute Tox.5; H313 Skin Sens.1; H317 STOT RE2; H373 (Bone marrow, Liver, Skin) Aquatic Acute1; H400 Aquatic Chronic1; H410	No data available	>= 2,5 - < 10
Cloquintocet-mexyl	99607-70-2	Acute Tox.4; H332 Skin Sens.1; H317 STOT RE2; H373 (Bladder) Aquatic Acute1; H400 Aquatic Chronic1; H410	No data available	>= 2,5 - < 10
calcium dodecylbenzenesulphonate	26264-06-2	Acute Tox.4; H302 Skin Irrit.2; H315 Eye Dam.1; H318 Aquatic Acute2; H401	No data available	>= 1 - < 2,5

2-ethylhexan-1-ol	104-76-7	Flam. Liq.4; H227 Acute Tox.5; H303 Acute Tox.4; H332 Skin Irrit.2; H315 Eye Irrit.2A; H319 STOT SE3; H335 (Respiratory system) Aquatic Acute3; H402	MPC-STEL: 10 mg/m3 Class 3 - Moderately dangerous, Substances which require special skin and eye protection Data Source: KZ OEL MPC-STEL: 10 mg/m3 Class 3 - Moderately dangerous, Substances which require special skin and eye protection Data Source: RU OEL	>= 1 - < 2,5

For explanation of abbreviations see section 16.

4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.

If inhaled : Remove to fresh air.
If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : If on clothes, remove clothes.
If on skin, rinse well with water.
Wash off with soap and plenty of water.
Get medical attention immediately if irritation develops and persists.

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 : The product contains petroleum distillates, which may pose an aspiration pneumonia hazard.
May be harmful if swallowed.
May be fatal if swallowed and enters airways.
Causes mild skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.

Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing
Avoid inhalation, ingestion and contact with skin and eyes.
If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Notes to physician : Treat symptomatically.

5. FIREFIGHTING MEASURES

Flammable properties

Flash point : > 95 °C

Upper explosion limit / Upper flammability limit : Not available for this mixture.

Lower explosion limit / Lower flammability limit : Not available for this mixture.

Flammability (liquids) : ignitable

Suitable extinguishing media : Dry chemical, CO2, water spray or regular foam.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : Do not spread spilled material with high-pressure water streams.
High volume water jet

Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Carbon oxides
Sulphur oxides
Hydrogen fluoride
Hydrogen chloride
Nitrogen oxides (NOx)
Fluorinated compounds
Chlorinated compounds
Thermal decomposition can lead to release of toxic and irritat-

ing vapors.

Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	:	Firefighters should wear protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Evacuate personnel to safe areas. Use personal protective equipment. If it can be safely done, stop the leak. Do not touch or walk through the spilled material. Never return spills in original containers for re-use. Mark the contaminated area with signs and prevent access to unauthorized personnel. Only qualified personnel equipped with suitable protective equipment may intervene.
Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Advice on safe handling	:	Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
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 conditions : The product should be stored at temperatures between 0 and 35°C. 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.

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
γ-butyrolactone	96-48-0	MPC-STEL (vapour and/or gas)	2 mg/m3	RU OEL
	Further information: Class 3 - Moderately dangerous			
		MPC-STEL (vapour and/or gas)	2 mg/m3	KZ OEL
	Further information: Class 3 - Moderately dangerous			
2-ethylhexan-1-ol	104-76-7	MPC-STEL (aerosol)	10 mg/m3	RU OEL
	Further information: Class 3 - Moderately dangerous, Substances which require special skin and eye protection			
		TWA	1 ppm 5,4 mg/m3	2017/164/EU
		MPC-STEL (aerosol)	10 mg/m3	KZ OEL
	Further information: Class 3 - Moderately dangerous, Substances which require special skin and eye protection			

Personal protective equipment

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

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

Remarks	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	:	Eye wash bottle with pure water Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	:	Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Protective measures	:	Plan first aid action before beginning work with this product. Always have on hand a first-aid kit, together with proper instructions. Wear suitable protective equipment. When using do not eat, drink or smoke. In the context of professional plant protection use as recommended, the end user must refer to the label and the instructions for use.
Hygiene measures	:	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
Form	:	liquid
Colour	:	brown
Odour	:	Aromatic hydrocarbon
pH	:	not determined
Melting point/freezing point	:	not determined
Boiling point/boiling range	:	not determined
Flash point	:	> 95 °C
Flammability (liquids)	:	ignitable

Self-ignition	:	not determined
Upper explosion limit / Upper flammability limit	:	Not available for this mixture.
Lower explosion limit / Lower flammability limit	:	Not available for this mixture.
Vapour pressure	:	Not available for this mixture.
Relative vapour density	:	not determined
Relative density	:	No data available
Density	:	1.046 g/l
Solubility(ies)		
Water solubility	:	dispersible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	Not available for this mixture.
Decomposition temperature	:	not determined
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	15,1 mm2/s (20 °C)
		11,1 mm2/s (40 °C)
Explosive properties	:	No data available
Oxidizing properties	:	No data available
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.
Incompatible materials	:	Avoid strong acids, bases, and oxidizers
Hazardous decomposition	:	Stable under recommended storage conditions.

products

11. TOXICOLOGICAL INFORMATION

Acute toxicity

May be harmful if swallowed.

Product:

Acute oral toxicity	:	Acute toxicity estimate: 3.723 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate: > 10 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method
Acute dermal toxicity	:	Acute toxicity estimate: > 5.000 mg/kg Method: Calculation method

Components:

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: vapour 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

γ-butyrolactone:

Acute oral toxicity	:	LD50 (Rat, male and female): 1.582 mg/kg
Acute inhalation toxicity	:	LC0 (Rat, male and female): > 5,1 mg/l Exposure time: 4 h Test atmosphere: vapour Remarks: no mortality

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

clodinafop-propargyl (ISO):

Acute oral toxicity : LD50 (Rat): 1.829 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 2,32 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg
Method: OECD Test Guideline 402

Cloquintocet-mexyl:

Acute oral toxicity : LD50 (Rat, male and female): > 5.000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat, male and female): > 0,935 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The component/mixture is moderately toxic after short term inhalation.

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

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 mild skin irritation.

Product:

Result : Mild skin irritation
Remarks : May cause mild irritation.

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

γ-butyrolactone:

Species : Rabbit
Result : No skin irritation

fenoxaprop-P-ethyl (ISO):

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

clodinafop-propargyl (ISO):

Method : OECD Test Guideline 404
Result : No skin irritation

Cloquintocet-mexyl:

Species	:	Rabbit
Assessment	:	No skin irritation
Method	:	OECD Test Guideline 404
Remarks	:	Minimal effects that do not meet the threshold for classification.

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:

Result	:	Risk of serious damage to eyes.
Remarks	:	May cause irreversible eye damage.

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

γ-butyrolactone:

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

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.

clodinafop-propargyl (ISO):

Assessment : No eye irritation
Remarks : Minimal effects that do not meet the threshold for classification.

Cloquintocet-mexyl:

Species : Rabbit
Assessment : No eye irritation
Method : OECD Test Guideline 405
Remarks : Minimal effects that do not meet the threshold for classification.

calcium dodecylbenzenesulphonate:

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

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

2-ethylhexan-1-ol:

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

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

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

Product:

Result : May cause sensitisation by skin contact.
Remarks : May cause sensitisation of susceptible persons by skin contact.

Components:

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

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

Alcohols, C9-11, ethoxylated:

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

γ-butyrolactone:

Test Type	:	Local lymph node assay (LLNA)
Species	:	Mouse
Method	:	OECD Test Guideline 429
Result	:	Does not cause skin sensitisation.

fenoxaprop-P-ethyl (ISO):

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

clodinafop-propargyl (ISO):

Method	:	OECD Test Guideline 406
Result	:	May cause sensitisation by skin contact.

Cloquintocet-mexyl:

Species	:	Guinea pig
Method	:	OECD Test Guideline 429
Result	:	The product is a skin sensitiser, sub-category 1B.

calcium dodecylbenzenesulphonate:

Test Type	:	Maximisation 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:

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 (vapour) 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

γ-butyrolactone:

Genotoxicity in vitro	:	Test Type: gene mutation test Result: negative Test Type: sister chromatid exchange assay Result: positive Test Type: sister chromatid exchange assay Result: negative
Genotoxicity in vivo	:	Test Type: gene mutation test Species: Drosophila melanogaster (vinegar fly) (male) Application Route: Oral Result: negative

Cloquintocet-mexyl:

Genotoxicity in vitro	:	Test Type: reverse mutation assay Method: OECD Test Guideline 471 Result: negative Test Type: gene mutation test Test system: Chinese hamster lung cells Method: OECD Test Guideline 476 Result: negative Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells Method: OECD Test Guideline 473 Result: negative
Genotoxicity in vivo	:	Test Type: Micronucleus test Species: Chinese hamster (male and female) Application Route: Oral Method: OECD Test Guideline 474 Result: negative
Germ cell mutagenicity - Assessment	:	Weight of evidence does not support classification as a germ cell mutagen.

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:

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

Species	:	Rat, male and female
Application Route	:	inhalation (vapour)
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.

γ-butyrolactone:

Species	:	Rat, male and female
Application Route	:	Oral
Exposure time	:	103 weeks
Dose	:	0, 225, 450 mg/kg bw
NOAEL	:	225 mg/kg bw/day
LOAEL	:	450 mg/kg bw/day
Result	:	negative

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

Cloquintocet-mexyl:

Species	:	Mouse, male
Application Route	:	Oral
Exposure time	:	18 month(s)
Dose	:	1.1, 11, 111, 583 mg/kg
NOAEL	:	111 mg/kg body weight
Result	:	negative
Carcinogenicity - Assessment	:	Weight of evidence does not support classification as a 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:

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 foetal 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

γ-butyrolactone:

Effects on fertility	:	Test Type: reproductive and developmental toxicity study Species: Rat, male and female Application Route: Oral Dose: 200, 400, 800 mg/kg/day General Toxicity - Parent: NOEL: 800 mg/kg bw/day General Toxicity F1: NOAEL: 800 mg/kg bw/day Method: OECD Test Guideline 422 Result: negative Remarks: Based on data from similar materials
Effects on foetal development	:	Test Type: reproductive and developmental toxicity study Species: Rat Application Route: Oral Dose: 0, 10, 50, 125, 500 mg/kg/day Duration of Single Treatment: 21 d General Toxicity Maternal: NOAEL: 500 mg/kg bw/day Embryo-foetal toxicity: NOAEL: 500 mg/kg bw/day Result: negative
Reproductive toxicity - Assessment	:	Weight of evidence does not support classification for reproductive toxicity

Cloquintocet-mexyl:

Effects on fertility	:	General Toxicity F1: NOAEL: 420 mg/kg body weight Fertility: NOAEL: 830 mg/kg body weight Method: OECD Test Guideline 416 Result: No effects on fertility and early embryonic development were detected.
Effects on foetal development	:	Species: Rabbit Application Route: Oral Dose: 0, 10, 60, 300 mg/kg bw/d General Toxicity Maternal: NOAEL: 60 mg/kg body weight Teratogenicity: NOAEL: 300 mg/kg body weight Developmental Toxicity: NOAEL: 60 mg/kg body weight Method: OECD Test Guideline 414 Result: negative
Reproductive toxicity - Assessment	:	Weight of evidence does not support classification for reproductive toxicity

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 foetal 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 foetal development	:	Test Type: Embryo-foetal 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:

Alcohols, C9-11, ethoxylated:

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

γ-butyrolactone:

Assessment	:	May cause drowsiness or dizziness.

Cloquintocet-mexyl:

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:

fenoxaprop-P-ethyl (ISO):

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

clodinafop-propargyl (ISO):

Target Organs	:	Bone marrow, Liver, Skin
Assessment	:	The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Cloquintocet-mexyl:

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

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 (vapour)
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

γ-butyrolactone:

Species	:	Rat, male
NOAEL	:	225 mg/kg bw/day
LOAEL	:	450 mg/kg bw/day
Application Route	:	Oral - gavage
Exposure time	:	91 d
Dose	:	0,56,112,225,450,900mg/kgbw

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

Cloquintocet-mexyl:

Species	:	Rat, male
NOAEL	:	3,77 mg/kg
Application Route	:	Oral
Exposure time	:	2 y
Dose	:	0.37, 3.8, 38, 75 mg/kg
Method	:	OECD Test Guideline 451

Species	:	Rat, male and female
NOAEL	:	9,66 - 10,2 mg/kg
Application Route	:	Oral
Exposure time	:	90 d
Dose	:	2.0, 9.7, 64, 384 mg/kg

Target Organs	:	Bladder
Species	:	Rat, male and female
NOAEL	:	1.000 mg/kg
Application Route	:	Skin contact
Exposure time	:	28 d
Dose	:	0, 50, 200 and 1000 mg/kg
Method	:	OECD Test Guideline 410

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.

Components:

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

May be fatal if swallowed and enters airways.

Cloquintocet-mexyl:

No aspiration toxicity classification

Experience with human exposure

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.

fenoxaprop-P-ethyl (ISO):

Remarks : No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : No data is available on the product itself.

Chronic aquatic toxicity : No data is available on the product itself.

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 : EL50 (Pseudokirchneriella subcapitata (green algae)): 1 - 3

plants		mg/l Exposure time: 24 h Method: OECD Test Guideline 201
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	EL50 (Daphnia magna (Water flea)): 0,89 mg/l Exposure time: 21 d Method: OECD Test Guideline 211
Toxicity to microorganisms	:	LL50 (Tetrahymena pyriformis): 677,9 mg/l Exposure time: 72 h Test Type: Growth inhibition

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

γ-butyrolactone:

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 56 mg/l Exposure time: 96 h Method: EPA-660/3-75-009
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 500 mg/l Exposure time: 48 h Method: Regulation (EC) No. 440/2008, Annex, C.2
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): > 1.000 mg/l Exposure time: 72 h Test Type: static test NOEC (Desmodesmus subspicatus (green algae)): 7,81 mg/l Exposure time: 72 h Test Type: static test
Toxicity to microorganisms	:	IC50 (Tetrahymena pyriformis): 4.518 mg/l Exposure time: 40 h
Toxicity to terrestrial organisms	:	LD50 (Birds): 100 mg/kg

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	:	IC50 (Desmodesmus subspicatus (green algae)): 0,51 mg/l

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

clodinafop-propargyl (ISO):

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 0,24 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 2 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (algae): > 3,9 mg/l Exposure time: 5 d
		IC50 (Scenedesmus subspicatus): 1,7 mg/l Exposure time: 72 h
M-Factor (Acute aquatic toxicity)	:	1
Toxicity to fish (Chronic toxicity)	:	NOEC (Oncorhynchus mykiss (rainbow trout)): 0,1 mg/l Exposure time: 21 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 0,23 mg/l Exposure time: 21 d
M-Factor (Chronic aquatic toxicity)	:	1

Toxicity to soil dwelling organisms	:	LC50 (Eisenia fetida (earthworms)): 210 mg/kg Exposure time: 14 d
Toxicity to terrestrial organisms	:	LD50 (Colinus virginianus (Bobwhite quail)): 1.455 mg/kg Exposure time: 14 d LD50 (Colinus virginianus (Bobwhite quail)): > 2.000 mg/kg LD50 (Apis mellifera (bees)): > 100 µg/bee End point: Acute contact toxicity LD50 (Apis mellifera (bees)): > 100 µg/bee End point: Acute oral toxicity

Cloquintocet-mexyl:

Toxicity to fish	:	LC50 (Salmo gairdneri): > 76 mg/l Exposure time: 96 h LC50 (Ictalurus punctatus (channel catfish)): 14 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): 0,63 mg/l Exposure time: 96 h Test Type: static test NOEC (Desmodesmus subspicatus (green algae)): 0,09 mg/l Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	:	1
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 32 mg/l End point: reproduction Exposure time: 21 d Method: OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	:	1
Toxicity to microorganisms	:	EC50 (activated sludge): > 1.000 mg/l Exposure time: 3 h Method: OECD Test Guideline 209
Toxicity to soil dwelling organisms	:	LC50 (Eisenia fetida (earthworms)): 1.000 mg/kg Exposure time: 14 d Method: OECD Test Guideline 207

Toxicity to terrestrial organisms	:	LD50 (Colinus virginianus (Bobwhite quail)): > 2.000 mg/kg NOEC (Colinus virginianus (Bobwhite quail)): 500 mg/kg LD50 (Anas platyrhynchos (Mallard duck)): > 2.000 mg/kg NOEC (Anas platyrhynchos (Mallard duck)): 500 mg/kg LD50 (Apis mellifera (bees)): >100 ug/bee Exposure time: 48 d End point: Acute oral toxicity LD50 (Apis mellifera (bees)): >100 ug/bee Exposure time: 48 d End point: Acute contact toxicity

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 daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 1,65 mg/l Exposure time: 21 d Remarks: Based on data from similar materials NOEC (Daphnia magna (Water flea)): 1,18 mg/l Exposure time: 21 d 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 soil dwelling organisms : LC50 (Eisenia fetida (earthworms)): 1.000 mg/kg
Exposure time: 14 d
Method: OECD Test Guideline 207

Toxicity to terrestrial organisms : LD50 (Colinus virginianus (Bobwhite quail)): 1.356 mg/kg
Exposure time: 14 d
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

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

γ-butyrolactone:

Biodegradability : Inoculum: activated sludge, non-adapted

Result: Readily biodegradable.
Biodegradation: 95 %
Exposure time: 14 d
Method: OECD Test Guideline 301C

fenoxaprop-P-ethyl (ISO):

Biodegradability : Result: Not readily biodegradable.

clodinafop-propargyl (ISO):

Biodegradability : Remarks: Not readily biodegradable.

Cloquintocet-mexyl:

Biodegradability : Result: Not readily biodegradable.

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 is available on the product itself.

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

γ-butyrolactone:

Bioaccumulation : Bioconcentration factor (BCF): 3,16
Method: QSAR

Partition coefficient: n-octanol/water : log Pow: -0,566 (25 °C)
pH: > 6 - 8

fenoxaprop-P-ethyl (ISO):

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

clodinafop-propargyl (ISO):

Bioaccumulation	:	Remarks: Bioaccumulation is unlikely.

Cloquintocet-mexyl:

Bioaccumulation	:	Species: Fish Bioconcentration factor (BCF): 1.000 Remarks: Bioaccumulation is unlikely.
Partition coefficient: n-octanol/water	:	log Pow: 5,03 (25 °C)

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

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.

clodinafop-propargyl (ISO):

Distribution among environmental compartments	:	Remarks: Low mobility in soil

Cloquintocet-mexyl:

Distribution among environmental compartments	:	Remarks: immobile

Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
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.

Hygienic standards:

(Allowable concentration in air, water, including fishery waters, soil)

Components	Air	Water	Soil	Data Source
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified 64742-94-5	TSEL: 0,2 mg/m3	MPC: 0,05 Milligrams per cubed decimeter Limiting health hazard indicator: toxic Hazard class: 3	No data available	List 2 List 5
γ-butyrolactone 96-48-0	MPC - maximum: 0,3 mg/m3 Limiting health hazard indicator: resorptive Hazard class: Class 3 - moderately dangerous MPC - average: 0,1 mg/m3 Limiting health hazard indicator: resorptive Hazard class: Class 3 - moderately dangerous	MPC: 2,3 Milligrams per cubed decimeter Limiting health hazard indicator: toxic Hazard class: 4 MAC: 5 mg/l Limiting health hazard indicator: sanitary-toxicological Hazard class: Class 4 - low hazard	No data available	List 1 List 4 List 5
fenoxaprop-P-ethyl (ISO) 71283-80-2	No data available	MPC: 0,05 Milligrams per cubed decimeter Limiting health hazard indicator: toxic Hazard class: 3	No data available	List 5
clodinafop-propargyl (ISO)	No data available	MPC: 0,25 Milligrams per	No data available	List 5

105512-06-9		cubed decimeter Limiting health hazard indicator: toxic Hazard class: 4		
Cloquintocet-mexyl 99607-70-2	No data available	MPC: 0,5 Milligrams per cubed decimeter Limiting health hazard indicator: sanitary and toxicological effects Hazard class: 4	No data available	List 5
2-ethylhexan-1-ol 104-76-7	MPC - maximum: 0,15 mg/m3 Limiting health hazard indicator: reflectory Hazard class: Class 4 - low hazard	MPC: 0,09 Milligrams per cubed decimeter Limiting health hazard indicator: toxic Hazard class: 4 MPC: 0,01 Milligrams per cubed decimeter Limiting health hazard indicator: sanitary and toxicological effects Hazard class: 3 MAC: 0,15 mg/l Limiting health hazard indicator: general sanitary Hazard class: Class 3 - moderately dangerous	No data available	List 1 List 4 List 5

For explanation of abbreviations see section 16.

13. DISPOSAL CONSIDERATIONS

Disposal methods

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

Contaminated packaging : Empty remaining contents.
Do not re-use empty containers.

Packaging that is not properly emptied must be disposed of as the unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

ADR

UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fenoxaprop-P-ethyl, clodinafop-propargyl, ALKYL(C3-C6)BENZENES)
Class	:	9
Packing group	:	III
Labels	:	9
Hazard Identification Number	:	90
Tunnel restriction code	:	(-)
Environmentally hazardous	:	yes

IATA-DGR

UN/ID No.	:	UN 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (Fenoxaprop-P-ethyl, clodinafop-propargyl, ALKYL(C3-C6)BENZENES)
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, clodinafop-propargyl, ALKYL(C3-C6)BENZENES)
Class	:	9
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Marine pollutant	:	yes

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

Not applicable for product as supplied.

Special precautions for user

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

15. REGULATORY INFORMATION

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

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

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. Cloquintocet-mexyl clodinafop-propargyl (ISO) fenoxaprop-P-ethyl (ISO)
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

Full text of H-Statements

H227	Combustible liquid.
H302	Harmful if swallowed.
H303	May be harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life.

H402	Harmful to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Asp. Tox.	:	Aspiration hazard
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Flam. Liq.	:	Flammable liquids
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitisation
STOT RE	:	Specific target organ toxicity - repeated exposure
STOT SE	:	Specific target organ toxicity - single exposure
2017/164/EU	:	Europe. Commission Directive 2017/164/EU establishing a fourth list of indicative occupational exposure limit values
KZ OEL	:	Kazakhstan. Order of the Ministry of Health No. KP DCM-70, Annex 2, Table 1 and Annex 3, Table 1 & 7 Maximum permissible concentration (MPC) of harmful substances in the air of the working area
RU OEL	:	SanPiN 1.2.3685-21 Table 2.1, Table 2.8, Table 2.16 & Table 2.17 Maximum permissible concentrations (MPC) in the air of the working area
2017/164/EU / TWA	:	Limit Value - eight hours
KZ OEL / MPC-STEL	:	Maximum Permissible Concentration - Short Term Exposure
RU OEL / MPC-STEL	:	Maximum Permissible Concentration - Short Term Exposure
List 1	:	SanPiN 1.2.3685-21 Table 1.1, Table 1.10, & Table 1.11 Maximum permissible concentration (MPC) in the air of urban and rural settlements
List 2	:	SanPiN 1.2.3685-21 Table 1.2, Table 1.12 & Table 1.13 Tentative Safe Exposure Levels (TSEL) in the air of urban and rural settlements
List 4	:	SanPiN 1.2.3685-21 Table 3.13, Table 3.15, Table 3.16 & Table 3.17 Maximum permissible concentrations (MPC) of chemicals in the water of drinking systems of centralized, including hot, and non-centralized water supply, water of underground and surface water bodies of domestic drinking and cultural and domestic water use, water of swimming pools, water parks
List 5	:	Order of the Russian Federal Fisheries Agency "Standards of maximum permissible concentrations of harmful substances in fishery water bodies"

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; 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; 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 con-

centration; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; 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

Other information :

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