

TWINAX XTRA

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Section 1: Identification

Product name : TWINAX XTRA

Design code : A13617AV

Manufacturer or supplier's details

Company : Syngenta Crop Protection Limited

Address : Level 4, 60 Parnell Road, Parnell
Auckland
New Zealand

Telephone : 09 306 1500 (weekdays)

Emergency telephone number : 0800 POISON (0800 764766) (National Poisons & Hazchem
Information Centre)
0800 734 607(Syngenta - 24 hours)

Telefax : None

Recommended use of the chemical and restrictions on use

Recommended use : Herbicide

Section 2: Hazard identification**GHS Classification**

Acute toxicity (Inhalation) : Category 4

Skin sensitisation : Category 1

Specific target organ toxicity - : Category 2 (Urinary system, Liver)
repeated exposure

Hazardous to the aquatic : Category 2
environment - chronic hazard

Hazardous to the environment : Hazardous to soil organisms

GHS label elements

Hazard pictograms :



Signal word : Warning

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Hazard statements : H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H373 May cause damage to organs (Urinary system, Liver) through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
H421 Very toxic to the soil environment.

Precautionary statements : P103 Read carefully and follow all instructions.

Prevention:

P260 Do not breathe mist or vapours.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
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

None known.

Section 3: Composition/information on ingredients

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
hydrocarbons, C10-C13, aromatics, <1% naphthalene	Not Assigned	>= 25 -< 30
2-methylpentane-2,4-diol	107-41-5	>= 10 -< 20
pinoxaden (ISO)	243973-20-8	>= 2.5 -< 10
cloquintocet-mexyl	99607-70-2	>= 1 -< 2.5
naphthalene	91-20-3	>= 0.25 -< 1

Section 4: First-aid measures

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General advice	:	Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment.
If inhaled	:	Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or poison control centre immediately.
In case of skin contact	:	Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.
In case of eye contact	:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.
If swallowed	:	If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting: contains petroleum distillates and/or aromatic solvents.
Most important symptoms and effects, both acute and delayed	:	Aspiration may cause pulmonary oedema and pneumonitis. May cause an allergic skin reaction. Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure.
Notes to physician	:	There is no specific antidote available. Treat symptomatically. Do not induce vomiting: contains petroleum distillates and/or aromatic solvents.

Section 5: Fire-fighting measures

Suitable extinguishing media	:	Extinguishing media - small fires Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Extinguishing media - large fires Alcohol-resistant foam or Water spray
Unsuitable extinguishing media	:	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards during fire-fighting	:	As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.
Hazardous combustion products	:	Carbon oxides Nitrogen oxides (NOx) Oxides of phosphorus Chlorine compounds

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Specific extinguishing methods : Do not allow run-off from fire fighting to enter drains or water courses.
Cool closed containers exposed to fire with water spray.

Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.

Hazchem Code : 3Z

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Prevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Clean contaminated surface thoroughly.
Clean with detergents. Avoid solvents.
Retain and dispose of contaminated wash water.

Section 7: Handling and storage

Advice on safe handling : No special protective measures against fire required.
Avoid contact with skin and eyes.
When using do not eat, drink or smoke.
For personal protection see section 8.

Conditions for safe storage : No special storage conditions required.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep out of the reach of children.
Keep away from food, drink and animal feedingstuffs.

Section 8: Exposure controls/personal protection**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
hydrocarbons, C10-C13, aromatics, <1% naphthalene	Not Assigned	TWA	8 ppm 50 mg/m3	Supplier

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2-methylpentane-2,4-diol	107-41-5	WES-Ceiling	25 ppm 121 mg/m3	NZ OEL
		TWA (Va- pour)	25 ppm	ACGIH
		STEL (Va- pour)	50 ppm	ACGIH
		STEL (Inhal- able fraction, Aerosol only)	10 mg/m3	ACGIH
pinoxaden (ISO)	243973-20-8	TLV-C	0.1 mg/m3	Syngenta
cloquintocet-mexyl	99607-70-2	TWA	1 mg/m3	Syngenta
naphthalene	91-20-3	WES-STEL	2 ppm 10 mg/m3	NZ OEL
	Further information: Suspected human carcinogen, Skin absorp- tion			
		WES-TWA	0.5 ppm 2.6 mg/m3	NZ OEL
	Further information: Suspected human carcinogen, Skin absorp- tion			
		TWA	10 ppm	ACGIH

Engineering measures : THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THE PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.

The extent of these protection measures depends on the actual risks in use.

Maintain air concentrations below occupational exposure standards.
Where necessary, seek additional occupational hygiene advice.

Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Suitable respiratory equipment:
Respirator with a half face mask
The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

Hand protection

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Material : Nitrile rubber
Break through time : > 480 min
Glove thickness : 0.5 mm

Remarks : Wear protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection : No special protective equipment required.
Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Remove and wash contaminated clothing before re-use.
Wear as appropriate:
Impervious clothing

Protective measures : The use of technical measures should always have priority over the use of personal protective equipment.
When selecting personal protective equipment, seek appropriate professional advice.

Personal protective equipment should comply with relevant national standards

Section 9: Physical and chemical properties

Appearance : liquid, clear
Colour : orange
Odour : sweetish
Odour Threshold : No data available
pH : 4.5
Concentration: 1 %w/v

Melting point/freezing point : No data available

Initial boiling point and boiling range : No data available

Flash point : 103 °C

Method: Pensky-Martens closed cup

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Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Density	:	0.965 g/cm ³ (25 °C)
Solubility(ies)		
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	380 °C
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	50 mPa,s (20 °C)
		22.39 mPa,s (40 °C)
Viscosity, kinematic	:	24.23 mm ² /s (40 °C)
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Surface tension	:	30.0 mN/m, 20 °C
Particle characteristics		
Particle size	:	No data available

Section 10: Stability and reactivity

Reactivity	:	None reasonably foreseeable.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	No decomposition if used as directed.
Incompatible materials	:	None known.
Hazardous decomposition	:	No hazardous decomposition products are known.

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products

Section 11: Toxicological information

Exposure routes : Ingestion
Inhalation
Skin contact
Eye contact

Acute toxicity

Harmful if inhaled.

Product:

Acute oral toxicity : LD50 (Rat, female): > 2,000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat, male and female): > 2.42 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance/mixture is not toxic on inhalation as defined by dangerous goods regulations.

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Components:**2-methylpentane-2,4-diol:**

Acute oral toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

pinoxaden (ISO):

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat, male): 4.63 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

cloquintocet-mexyl:

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

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Acute inhalation toxicity : LC50 (Rat, male and female): > 0.935 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The component/mixture is moderately toxic after short term inhalation.
Remarks: Highest attainable concentration

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

naphthalene:

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after single ingestion.

Skin corrosion/irritation

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

Product:

Species : Rabbit
Result : Mild skin irritation

Components:**hydrocarbons, C10-C13, aromatics, <1% naphthalene:**

Result : Repeated exposure may cause skin dryness or cracking.

2-methylpentane-2,4-diol:

Species : Rabbit
Result : Irritating to skin.

pinoxaden (ISO):

Method : Based on Human Evidence
Result : Irritating to skin.

cloquintocet-mexyl:

Species : Rabbit
Result : No skin irritation

Serious eye damage/eye irritation

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

Product:

Species : Rabbit
Result : No eye irritation

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Components:**2-methylpentane-2,4-diol:**

Species	: Rabbit
Result	: Irritation to eyes, reversing within 21 days

pinoxaden (ISO):

Species	: Rabbit
Result	: Irritation to eyes, reversing within 21 days

cloquintocet-mexyl:

Species	: Rabbit
Result	: No eye irritation

Respiratory or skin sensitisation**Skin sensitisation**

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified due to lack of data.

Product:

Test Type	: Buehler Test
Species	: Guinea pig
Result	: The product is a skin sensitiser, sub-category 1A.

Components:**pinoxaden (ISO):**

Test Type	: Local lymph node assay (LLNA)
Species	: Mouse
Result	: The product is a skin sensitiser, sub-category 1A.

Test Type	: Respiratory sensitisation
Result	: Does not cause respiratory sensitisation.
Remarks	: Experience with human exposure

cloquintocet-mexyl:

Species	: Guinea pig
Result	: May cause sensitisation by skin contact.

Chronic toxicity**Germ cell mutagenicity**

Not classified due to lack of data.

Components:**2-methylpentane-2,4-diol:**

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

pinoxaden (ISO):

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

cloquintocet-mexyl:

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

Carcinogenicity

Suspected of causing cancer.

Components:**2-methylpentane-2,4-diol:**

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

pinoxaden (ISO):

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

cloquintocet-mexyl:

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

naphthalene:

Carcinogenicity - Assessment : Limited evidence of carcinogenicity in animal studies

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

Components:**2-methylpentane-2,4-diol:**

Reproductive toxicity - Assessment : Some evidence of adverse effects on development, based on animal experiments.

pinoxaden (ISO):

Reproductive toxicity - Assessment : No toxicity to reproduction

cloquintocet-mexyl:

Reproductive toxicity - Assessment : No toxicity to reproduction

STOT - single exposure

Not classified due to lack of data.

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Components:**pinoxaden (ISO):**

Assessment	:	Based on Human Evidence The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.
Remarks	:	Breathing difficulties Cough Acute irritation of the respiratory system leading to tightness of the chest and an asthmatic condition.

cloquintocet-mexyl:

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

May cause damage to organs (Urinary system, Liver) through prolonged or repeated exposure.

Components:**pinoxaden (ISO):**

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

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

Aspiration toxicity

Not classified due to lack of data.

Components:**hydrocarbons, C10-C13, aromatics, <1% naphthalene:**

May be fatal if swallowed and enters airways.

Section 12: Ecological information**Ecotoxicity****Product:**

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 70.71 mg/l Exposure time: 96 h
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Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 1.31 mg/l Exposure time: 48 h
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- Toxicity to algae/aquatic plants : ErC50 (*Raphidocelis subcapitata* (freshwater green alga)): 29.8 mg/l
Exposure time: 96 h
- NOEC (*Raphidocelis subcapitata* (freshwater green alga)): 6.4 mg/l
End point: Growth rate
Exposure time: 96 h
- ErC50 (*Lemna gibba* (gibbous duckweed)): 32 mg/l
Exposure time: 7 d
- EC10 (*Lemna gibba* (gibbous duckweed)): 3.7 mg/l
End point: Growth rate
Exposure time: 7 d
- ErC50 (*Glyceria maxima* (reed sweet grass)): 5.76 mg/l
Exposure time: 14 d
- EC10 (*Glyceria maxima* (reed sweet grass)): 1.25 mg/l
End point: Growth rate
Exposure time: 14 d
- Toxicity to soil dwelling organisms : LC50 (*Eisenia fetida* (earthworms)): 329.9 mg/kg
Exposure time: 14 d
- EC50 (*Eisenia fetida* (earthworms)): Calculated value 32.9 mg/kg
Exposure time: 14 d
- Toxicity to terrestrial organisms : LD50 (*Apis mellifera* (bees)): 189.2 µg/bee
Exposure time: 48 h
End point: Acute oral toxicity
- LD50 (*Apis mellifera* (bees)): > 600 µg/bee
Exposure time: 48 h
End point: Acute contact toxicity
- LD50 (*Coturnix japonica* (Japanese quail)): > 2,000 mg/kg
End point: Acute oral toxicity

Components:

hydrocarbons, C10-C13, aromatics, <1% naphthalene:

- Toxicity to fish : LL50 (*Oncorhynchus mykiss* (rainbow trout)): 3.6 mg/l
Exposure time: 96 h
Remarks: Information given is based on data obtained from similar substances.
- Toxicity to daphnia and other aquatic invertebrates : EL50 (*Daphnia magna* (Water flea)): 1.1 mg/l
Exposure time: 48 h
Remarks: Information given is based on data obtained from

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similar substances.

Toxicity to algae/aquatic plants : EL50 (Raphidocelis subcapitata (freshwater green alga)): 7.9 mg/l
End point: Growth rate
Exposure time: 72 h
Remarks: Information given is based on data obtained from similar substances.

NOELR (Raphidocelis subcapitata (freshwater green alga)): 0.22 mg/l
End point: Growth rate
Exposure time: 72 h
Remarks: Information given is based on data obtained from similar substances.

Ecotoxicology Assessment

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

pinoxaden (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 10.3 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 52 mg/l
Exposure time: 48 h

LC50 (Americamysis): 4.7 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): 2.39 mg/l
Exposure time: 72 h

EC10 (Raphidocelis subcapitata (freshwater green alga)): 0.601 mg/l
End point: Growth rate
Exposure time: 72 h

ErC50 (Glyceria maxima (reed sweet grass)): 0.498 mg/l
Exposure time: 14 d

EC10 (Glyceria maxima (reed sweet grass)): 0.0239 mg/l
End point: Growth rate
Exposure time: 14 d

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 6.6 mg/l
Exposure time: 28 d

M-Factor (Chronic aquatic toxicity) : 1

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toxicity)

Toxicity to soil dwelling organisms

: LC50 (*Eisenia fetida* (earthworms)): > 1,000 mg/kg
Exposure time: 14 dEC50 (*Eisenia fetida* (earthworms)): Calculated value > 100 mg/kg

Exposure time: 14 d

Toxicity to terrestrial organisms

: LD50 (*Colinus virginianus* (Bobwhite quail)): > 2,250 mg/kg
Exposure time: 14 d
End point: Acute oral toxicityLD50 (*Apis mellifera* (bees)): > 100 µg/bee

Exposure time: 48 h

End point: Acute oral toxicity

LD50 (*Apis mellifera* (bees)): > 100 µg/bee

Exposure time: 48 h

End point: Acute contact toxicity

cloquintocet-mexyl:

Toxicity to fish

: LC50 (*Oncorhynchus mykiss* (rainbow trout)): > 0.97 mg/l
Exposure time: 96 hLC50 (*Gobiocypris rarus* (rare gudgeon)): 0.102 mg/l

Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates

: EC50 (*Daphnia magna* (Water flea)): > 0.82 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants

: ErC50 (*Desmodesmus subspicatus* (green algae)): > 2.2 mg/l
Exposure time: 72 hNOEC (*Desmodesmus subspicatus* (green algae)): 0.12 mg/l

End point: Growth rate

Exposure time: 72 h

M-Factor (Acute aquatic toxicity)

: 1

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

: NOEC (*Daphnia* (water flea)): > 0.437 mg/l
Exposure time: 21 d

M-Factor (Chronic aquatic toxicity)

: 1

Toxicity to microorganisms

: EC50 (activated sludge): > 1,000 mg/l
Exposure time: 3 h

Toxicity to soil dwelling organisms

: EC50 (*Eisenia fetida* (earthworms)): > 100 mg/kg
Exposure time: 14 d

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naphthalene:**Ecotoxicology Assessment**

Acute aquatic toxicity : Very toxic to aquatic life.

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

Persistence and degradability**Components:****hydrocarbons, C10-C13, aromatics, <1% naphthalene:**

Biodegradability : Result: Readily biodegradable.

2-methylpentane-2,4-diol:

Biodegradability : Result: Readily biodegradable.

pinoxaden (ISO):

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 0.1 d
Remarks: Product is not persistent.**cloquintocet-mexyl:**

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 0.4 d
Remarks: Product is not persistent.**Bioaccumulative potential****Components:****pinoxaden (ISO):**Bioaccumulation : Bioconcentration factor (BCF): 1.17
Remarks: Low bioaccumulation potential.

Partition coefficient: n-octanol/water : log Pow: 3.2 (25 °C)

cloquintocet-mexyl:

Bioaccumulation : Remarks: Does not bioaccumulate.

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

Mobility in soil**Components:****pinoxaden (ISO):**

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Distribution among environmental compartments : Remarks: Moderately mobile in soils
Stability in soil : Dissipation time: 0.4 d
Percentage dissipation: 50 % (DT50)
Remarks: Product is not persistent.

cloquintocet-mexyl:

Distribution among environmental compartments : Remarks: immobile
Stability in soil : Dissipation time: 2.4 d
Percentage dissipation: 50 % (DT50)
Remarks: Product is not persistent.

Other adverse effects**Components:****2-methylpentane-2,4-diol:**

Results of PBT and vPvB assessment : Substance is not persistent, bioaccumulative, and toxic (PBT).
Substance is not very persistent and very bioaccumulative (vPvB).

pinoxaden (ISO):

Results of PBT and vPvB assessment : Substance is not persistent, bioaccumulative, and toxic (PBT).
Substance is not very persistent and very bioaccumulative (vPvB).

cloquintocet-mexyl:

Results of PBT and vPvB assessment : Substance is not persistent, bioaccumulative, and toxic (PBT).
Substance is not very persistent and very bioaccumulative (vPvB).

naphthalene:

Results of PBT and vPvB assessment : Substance is not persistent, bioaccumulative, and toxic (PBT).
Substance is not very persistent and very bioaccumulative (vPvB).

Section 13: Disposal considerations**Disposal methods**

Waste from residues : Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
Refer to the product label for specific disposal/recycling information
Otherwise, dispose of waste at an approved landfill or other approved facility that will ensure the substance does not exceed the tolerable exposure limit (TEL) or environmental exposure limit (EEL), where relevant, or will treat the substance so that it is rendered no longer hazardous.

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Contaminated packaging : Empty remaining contents.
Triple rinse containers.
Add rinsings to spray tank
Recycle empty container through Agrecovery (0800 247 326, www.agrecovery.co.nz).
Empty containers can be landfilled, when in accordance with the local regulations.
Do not re-use empty containers.

Section 14: Transport information**International Regulations****UNRTDG**

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(SOLVENT NAPHTHA)
Class : 9
Packing group : III
Labels : 9
Environmentally hazardous : yes
Remarks : This product can be subject to exemptions when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a net mass of 5 kg or less for solids.

IATA-DGR

UN/ID No. : UN 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(SOLVENT NAPHTHA)
Class : 9
Packing group : III
Labels : Miscellaneous
Packing instruction (cargo aircraft) : 964
Packing instruction (passenger aircraft) : 964
Environmentally hazardous : yes
Remarks : This product can be subject to exemptions when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a net mass of 5 kg or less for solids.

IMDG-Code

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

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Marine pollutant : yes
Remarks : This product can be subject to exemptions when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a net mass of 5 kg or less for solids.

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

Not applicable for product as supplied.

National Regulations**NZS 5433**

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(SOLVENT NAPHTHA)
Class : 9
Packing group : III
Labels : 9
Hazchem Code : 3Z
Marine pollutant : no

Special precautions for user

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

Section 15: Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****HSNO Approval Number**

HSR101430

ACVM Registration No P9759

Tolerable Exposure Limits (TEL)

Not applicable

Environmental Exposure Limits (EEL)

Not applicable

HSW Controls

Certified handler certificate not required.

Tracking hazardous substance not required.

Record keeping is required

Refer to the Health and Safety at Work (Hazardous Substances) Regulations 2017, for further information.

Section 16: Other information

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Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Date format : dd.mm.yyyy

Full text of other abbreviations

ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
NZ OEL	: New Zealand. Workplace Exposure Standards for Atmospheric Contaminants
Syngenta	: Syngenta Occupational Exposure Limit
ACGIH / TWA	: 8-hour, time-weighted average
ACGIH / STEL	: Short-term exposure limit
NZ OEL / WES-TWA	: Workplace Exposure Standard - Time Weighted average
NZ OEL / WES-STEEL	: Workplace Exposure Standard - Short-Term Exposure Limit
NZ OEL / WES-Ceiling	: Workplace Exposure Standard - Ceiling
Syngenta / TLV-C	: Ceiling Limit Value
Syngenta / TWA	: Time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not

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to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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