

Safety Data Sheet

Safety Data Sheet/ Pilot Ultra

Issue Date : January 20, 2023

Revision Date : -

Version No. : 1

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

1.1. Product identifier

Name of product : **Pilot Ultra**
Other names : Quizalofop-P-ethyl 50 g/L SC, Quizalofop-P-ethyl 5 % w/v SC Targa Super 5SC, Etamine, Targa Flo
Formulation code : TASC-220 HP
Type of formulation : Suspension Concentrate (SC)
Product registration number : 17136
Unique Formula Identifier (UFI) : W9DY-WUHV-N00X-KK2C

1.2. Relevant identified uses of the substance or mixture and uses advised against

Function : Plant protection product, Herbicide
Recommended restrictions on use : Professional use

1.3. Details of the supplier of the safety data sheet

Manufacturer and Supplier

Nissan Chemical Europe S.A.S
Parc d'Affaires de Crécy 10A, rue de la Voie Lactée 69370 Saint Didier au Mont d'Or, France
Contact person : Mr. Yasuhiro Fukami
Phone : +33 (0)4 37 64 40 20

1.4. Emergency telephone number

Nissan Chemical Europe S.A.S
: +33 (0)4 37 64 40 20 (available only during office hours)

2. HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 [CLP]

Not classified.

2.2. Label elements

Labelling in accordance with Regulation (EC) No 1272/2008 [CLP]

Hazard pictogram
Not required.

Signal word
Not required.

Hazard statements
Not required.

2. HAZARD IDENTIFICATION (continued)

Precautionary statements
Not required.

Supplementary statements

EUH208 : Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.
EUH401 : To avoid risks to human health and the environment comply with the instructions for use.

2.3. Other hazards

This product contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1 % or higher.

Ecological information: This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1 % or higher.

Toxicological information: This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1 % or higher. The product will be regarded to be neither PBT nor vPvB.

3. COMPOSITION/INFORMATION OF INGREDIENTS**3.2. Mixtures****Chemical Composition**

Quizalofop-P-ethyl	> 1 - < 10	% w/w
Polyoxyethylene alkyl ether	> 10 - < 30	% w/w
Others	> 60 - < 80	% w/w

Active Ingredient

Common name : Quizalofop-P-ethyl
Code no. : D(+) NC-302
CAS No. : 100646-51-3
Chemical name
(CA) : Propanoic acid, 2-[4-[(6-chloro-2-quinoxalinyloxy)phenoxy]-, ethyl ester, (*R*)-
(IUPAC) : Ethyl (*R*)-2-[4-(6-chloroquinoxalin-2-yloxy)phenoxy] propionate
Classification in accordance with Regulation (EC) No 1272/2008 [CLP]
: Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1
H302, H400, H410
REACH registration No.
: Not assigned
EINECS or ELINCS No.
: 682-518-2

Inert Ingredient 1

Common name : Polyoxyethylene alkyl ether
CAS No. : 84133-50-6
Content : > 10 - < 30 % w/w
Classification in accordance with Regulation (EC) No 1272/2008 [CLP]
: Eye Irrit. 1
H318
REACH registration No.
: Not disclosed
EINECS or ELINCS No.
: Polymer

4. FIRST AID MEASURES

4.1. Description of first aid measures

- Eye contact : Immediately rinse with running water for at least 15 minutes. Seek medical advice.
- Skin contact : Remove all contaminated clothing, shoes and socks from the affected area. Wash material off the skin in flowing water or shower with soap. If irritation persists, consult a physician immediately.
- Inhalation : If respiratory discomfort occurs, move the person to fresh air. If not breathing, give mouth-to-mouth resuscitation (or an artificial respiration). Keep warm with blanket and keep at rest. Seek emergency medical advice.
- Ingestion : Do not induce vomiting. Wash out mouth with water. Do not give anything by mouth if person is unconscious. Seek emergency medical advice.

4.2. Most important symptoms and effects, both acute and delayed

No symptoms have been identified in humans to date.

4.3. Indication of any immediate medical attention and special treatment needed

Treat based on judgment by physician in response to symptoms of patient. No specific antidotes are known.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

- Suitable extinguishing media : Water, foam, dry chemicals or carbon dioxide.
- Extinguishing media which shall not be used for safety reasons : High volume water jet.

5.2. Special hazards arising from the substance or mixture

Carbon dioxide, carbon monoxide, hydrogen chloride and oxides of nitrogen are potential thermal decomposed products.

5.3. Advice for firefighters

In the event of fire and/or explosion do not breathe fumes. Use self-contained breathing apparatus and protective clothing. Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing, shoes, gloves and goggles. Avoid contact with spilled product or contaminated surfaces. When dealing with a spillage do not eat, drink or smoke.

6.2. Environmental precautions

Keep unauthorized persons, children and animals away from the affected area. Prevent spillage from entering the drainage systems or watercourses.

6.3. Methods and material for containment and cleaning up

Carefully sweep up and collect the spilled material using an inert absorbent material (sand, vermiculite, or sawdust) and place in a closed container (drum) for disposal. Remove (large quantities) with vacuum truck. Do not raise dust. Wash affected area with water containing detergent.

6.4. Reference to other sections

See section 8 for personnel protective equipment.
See section 13 for waste disposal.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

No specific precautions required when handling unopened packs/containers. Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid contact with skin or eyes. Protect containers against physical damage. Wear suitable protective clothing, shoes, gloves and goggles during handling. Do not eat, drink, or smoke during the work. Prevent spillage from entering the drainage systems or watercourses.

7.2. Conditions for safe storage, including any incompatibilities

Keep tightly closed in original labeled container. Store in a cool and dry place and protect from direct sunlight. Keep away from the reach of children. Keep away from foods, drinks and animal feeding stuffs.

7.3. Specific end use(s)

Use this product only for plant protection.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1. Control parameters

Exposure limit values (DNEL, PNEC)
: Not available

8.2. Exposure controls

Exposure controls

Occupational exposure controls

Respiratory protection

: Filter apparatus (a half face filter mask, filter type A)

Hand protection : Chemical resistant gloves, Rubber gloves

Eye protection : Safety glasses or goggles

Skin protection : Impervious clothing such as gloves, apron or PVC boots

Environmental exposure controls

: Prevent spillage from entering the drainage systems or watercourses.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state : Liquid
 Colour : Opaque white
 Odour : Odourless
 Melting point : No data available.
 Boiling point : > 100 °C (approximately 70% water based product)
 Flammability : See Auto-ignition temperature
 Lower and upper explosion limit : Not explosive
 Flash point : No data available.
 Auto-ignition temperature : 450 °C
 Decomposition temperature : Not required as this product is not self-reactive.
 pH : 6.2 (1% w/v suspension)
 Kinetic viscosity : 3.65 mm² s⁻¹ at 40°C
 Solubility (QPE) : Water 0.61 mg/L (20 °C)
 n-Heptane 7.2 g/L (20 °C)
 Methanol 35 g/L (20 °C)
 Acetone > 250 g/L (22 - 23 °C)
 1,2-Dichloroethane > 1000 g/L (22 - 23 °C)
 Partition coefficient (*n*-octanol/water) (QPE) : Log Pow 4.61 at 23 °C
 Vapour pressure : 1.1 x 10⁻⁷ Pa at 20 °C (QPE)
 Relative density : 1.015 g/ml (20°C)

9. PHYSICAL AND CHEMICAL PROPERTIES (continued)

Relative vapour density
: No data available.
Particle characteristics
: Not required as this product is liquid.

9.2. Other information

No other information is available.

10. STABILITY AND REACTIVITY

10.1. Reactivity

May react with strong bases, acids or strong oxidizing agents, such as chlorates, nitrates, peroxides.

10.2. Chemical stability

Stable under normal ambient storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions will not occur.

10.4. Conditions to avoid

Avoid high temperatures. Protect from sunlight, open flame, sources of heat and humidity.

10.5. Incompatible materials

May react with strong bases, acids or strong oxidizing agents, such as chlorates, nitrates, peroxides.

10.6. Hazardous decomposition products

None hazardous decomposition products under normal conditions of storage and use. Thermal decomposition products include carbon monoxide, nitrogen oxides and halogenated compounds.

11. TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 [CLP]

Information on likely routes of exposure

: Ingestion, inhalation, skin contact and eye contact

Product

Acute oral toxicity LD₅₀ (rats)

: > 2,000 mg/kg
This product has no acute oral toxicity.

Acute dermal toxicity LD₅₀ (rats)

: > 2,000 mg/kg
This product has no acute dermal toxicity.

Acute inhalation toxicity LC₅₀ (rats)

: 5.37 mg/L (4 hrs.)
This product has no acute inhalation toxicity.

Eye irritation (rabbits)

: Slight to moderate irritation (not require R36)

Skin irritation (rabbits)

: Transient and very slight irritation (not require R38)

Sensitization (guinea pigs)

: No skin sensitization

11. TOXICOLOGICAL INFORMATION (contineud)**Components****Quizalofop-P-ethyl (ISO)**

Toxicokinetics, metabolism and distribution

: Rapidly absorbed and extensively metabolised. Up to 70% of radioactivity was excreted in urine and faeces within 48 hours. Very low potential for accumulation.

Short-term oral toxicity (90 days)

: NOAEL (rats) 7.7 mg/kg/day

Short-term oral toxicity (1 year)

: NOAEL (dogs) 13.4 mg/kg/day

Short-term dermal toxicity (21 days)

: NOEL (rats) 2,000 mg/kg

Chronic/Carcinogenicity (1.5 years/mice)

: NOAEL (toxicity) 1.55 mg/kg/day

: NOEL (tumour) Not carcinogenic

Chronic/Carcinogenicity (2 years/rats)

: NOAEL (toxicity) 0.9 mg/kg/day

: NOEL (tumour) Not carcinogenic

Reproductive toxicity (rats)

: NOEL (toxicity) 25 mg/kg diet

: NOEL (reproduction) No effects on reproduction

Developmental toxicity (rats)

: NOEL (toxicity) 30 mg/kg/day

: NOEL (development) 100 mg/kg/day Not teratogenic

Developmental toxicity (rabbits)

: NOEL (toxicity) 30 mg/kg/day

: NOEL (development) 60 mg/kg/day Not teratogenic

Mutagenicity

: Not mutagenic (Negative in *in vitro* & *in vivo* studies)**Polyoxyethylene alkyl ether**Acute oral toxicity LD₅₀ (rats)

: 1,800 mg/kg [reference value]

Acute dermal toxicity LD₅₀ (rats)

: 2,000 mg/kg [reference value]

Acute inhalation toxicity

(Gases) : Not applicable

(Vapour) : No data available

(Dust and mist) : No data available

Skin corrosion/irritation

: Mild irritability (rabbits, 20 % aq. solution)/ No corrosive [as reference]

Negative (humans, open, 0.6 % aq. solution, 24h)

Eye damage/irritation: Positive (rabbits, 20 % aq. solution, no eye washing)/No corrosive [reference value]

Sensitization - Respiratory or skin

: No skin sensitization [as reference]

Germ cell mutagenicity

: Negative (mutagenicity test with use of microorganisms) [as reference]

Carcinogenicity

(IRAC) : Not listed on IRAC

(Japan Society for Occupational Health)

: Not listed

Toxic to reproduction : Teratogenicity was not confirmed. (oral administration in rats; No observable adverse effect level in 2 generations; 1,600 ppm dose) [reference]

Specific target organ systemic toxicity (Single exposure)

: No data available

Specific target organ systemic toxicity (Repeated exposure)

: No data available

Aspiration hazard

: No data available

11. TOXICOLOGICAL INFORMATION (contineud)**11.2. Information on other hazards****Endocrine disrupting properties**

This product does not contain components considered to be have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1 % or higher.

12. ECOLOGICAL INFORMATION**12.1. Toxicity****Product**

Toxicity to fish	: LC ₅₀ (96 h, Rainbow trout)	7.68 mg/L
Toxicity to Daphnia	: EC ₅₀ (48 h, <i>Daphnia magna</i>)	17.3 mg/L
Toxicity to algae	: EC ₅₀ (72 h, <i>S. capricornutum</i>)	19.1 mg/L
Toxicity to bees	: LD ₅₀ (Oral/Contact, 48h, <i>Apis mellifera</i>)	> 100 µg /bee
Toxicity to earthworm:	14-day LC ₅₀ (<i>Eisenia foetida</i>)	> 1,000 mg/kg soil

Components**Quizalofop-P-ethyl (ISO)**

Toxicity to fish	: LC ₅₀ (96 h, Rainbow trout)	0.388 mg/L
	: NOEC (21 days, Rainbow trout)	0.044 mg/L
Toxicity to <i>Daphnia</i>	: EC ₅₀ (48 h, <i>Daphnia magna</i>)	0.29 mg/L
Toxicity to algae	: EC ₅₀ (5 d, <i>S. capricornutum</i>)	0.021 mg/L
Toxicity to aquatic plants	: EC ₅₀ (7 d, <i>Lemna gibba</i> G3)	0.0828 mg/L
Toxicity to earthworm:	LC ₅₀ (<i>Eisenia foetida</i>)	>1,000 mg/kg soil
Toxicity to bird	: LD ₅₀ (Bobwhite quail)	>2,000 mg/kg
	: LC ₅₀ (5d, Bobwhite quail/Mallard duck)	>2,000 mg/kg diet
	: LC ₅₀ (5d, Mallard duck)	>2,000mg/kg
	: NOEL (reproduction)	500 mg/kg diet
Soil micro-organism	: No effects on soil nitrification and respiration	
Sewage treatment	: No adverse effect in sewage sludge organisms	

Polyoxyethylene alkyl ether

Toxicity to fish	: LC ₅₀ (96 h, <i>Oryzias latipes</i>)	11 mg/L	[reference value]
Toxicity to <i>Daphnia</i>	: EC ₅₀ (48 h, <i>Daphnia magna</i>)	0.29 mg/L	[reference value]

12.2. Persistence and degradability**Product**

No information is available for the product.

Components**Quizalofop-P-ethyl (ISO)**

Quizalofop-P-ethyl is hydrolytically stable, but readily degraded in soils and water/sediment systems.

Hydrolysis (20°C)	: DT ₅₀	> 365 days	(pH 4)
		112 days	(pH 7)
		< 1 day	(pH 9)
Aqueous photolysis (25°C)	: DT ₅₀	38.3 days	(pH 5 xenon arc lamp)
Degradation in soil (20°C)	: DT ₅₀	< 2 days	
Degradation in water/sediment (20°C)	: DT ₅₀	< 2 days	
Ready biodegradability	: Poorly degradable		

12. ECOLOGICAL INFORMATION (continued)**Polyoxyethylene alkyl ether**

No data available.

12.3. Bioaccumulative potential**Product**

No information is available for the product.

Components**Quizalofop-P-ethyl (ISO)**

The potential of the substance to accumulate in biota and pass through the food chain is considered to be low based on the BCF and a rapid degradation of the substance.

Partition coefficient (*n*-octanol/water)

: Log Pow 4.61 at 23 °C

Bioconcentration (Bluegill sunfish)

: BCF (28 days) 380 x (whole fish)

: Depuration (14 days) <1 % remained in whole fish

Polyoxyethylene alkyl ether

No data available.

12.4. Mobility in soil**Product**

No information is available for the product.

Components**Quizalofop-P-ethyl (ISO)**

Quizalofop-P-ethyl is readily degraded to acid metabolite quizalofop-P in the environment. The acid quizalofop-P is less toxic than the parent quizalofop-P-ethyl. Quizalofop-P is further degraded in the environment.

Surface tension (quizalofop-P-ethyl)

: Not applicable due to the water solubility (less than 1 mg/L)

Adsorption/desorption (quizalofop-P)

: KFadsoc : 214- 1791 (acid metabolite: low-medium mobility)

Polyoxyethylene alkyl ether

No data available.

12.5. Results of PBT and vPvB assessment**Product**

This product contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1 % or higher.

12.6. Endocrine disrupting properties**Product**

This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1 % or higher.

12. ECOLOGICAL INFORMATION (continued)

12.7. Other adverse effects

Investigations indicate no significant loss of the parent quizalofop-P-ethyl to the air from either soils or plant surfaces following pesticide application.

Photochemical oxidative degradation in air
: DT₅₀ 4.5 hours

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Do not contaminate water, foodstuffs, feed or seed by disposal.

PRODUCT DISPOSAL

Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or burned in incinerator in accordance with all applicable regulations.

CONTAINER DISPOSAL

Completely empty container by shaking and tapping sides and bottom to loosen clinging particles. Do not reuse container. Triple rinse container, then puncture and dispose of by incineration in accordance with all applicable regulations.

14. TRANSPORT INFORMATION

14.1. UN number

3082

14.2. UN proper shipping name

Environmental Hazardous Substance, Liquid n.o.s. (quizalofop-P-ethyl)

14.3. Transport hazard class(es)

Class 9

14.4. Packing group

Packing Group III

14.5. Environmental hazards

Marine Pollutant Label
: Marine Pollutant

14.6. Special precautions for user

No special precautions available.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No bulk transportation intended.

14.8. Supplemental information

IMDG

UN No. : 3082
Class : 9
Packing Group : III
Ems : F-A, S-F
Marine Pollutant Label : Marine Pollutant
Proper Shipping Name : Environmental Hazardous Substance, Liquid n.o.s.
(quizalofop-P-ethyl)

14. TRANSPORT INFORMATION (continued)**ICAO/IATA**

UN No. : 3082
 Class : 9
 Packing Group : III
 Proper Shipping Name : Environmental Hazardous Substance, Liquid n.o.s.
 (quizalofop-P-ethyl)

ADR/RID

UN No. : 3082
 Class : 9
 Packing Group : III
 Proper Shipping Name : Environmental Hazardous Substance, Liquid n.o.s.
 (quizalofop-P-ethyl)

ADN/ADNR

UN No. : 3082
 Class : 9
 Packing Group : III
 Proper Shipping Name : Environmental Hazardous Substance, Liquid n.o.s.
 (quizalofop-P-ethyl)

15. REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU**

The product is regulated under the EU Directive(s) or Regulation(s) on plant protection products since it is one of plant protection products.

Further Information

WHO Classification : III (Slightly hazardous)

15.2. Chemical safety assessment

The chemical safety assessment has not been carried out for this product yet.

16. OTHER INFORMATION**16.1. Classification and procedure used to derive the classification for mixtures in accordance with Regulation (EC) No 1272/2008 [CLP]**

Classification in accordance with Regulation (EC) No 1272/2008 [CLP]	Classification procedure
Not classified.	---

16.2. Relevant Hazard and Precautionary statements (See Sec. 2 and 3)

Hazard statements

H302 : Harmful if swallowed.
 H318 : Causes serious eye damage.
 H400 : Very toxic to aquatic life.
 H410 : Very toxic to aquatic life with long lasting effects.

16. OTHER INFORMATION (continued)

Precautionary statements

- P264 : Wash hands thoroughly after handling.
- P270 : Do not eat, drink or smoke when using this product.
- P273 : Avoid release to the environment.
- P280 : Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P312 : IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P310 : Immediately call a POISON CENTER or doctor/physician.
- P330 : Rinse mouth.
- P391 : Collect spillage.
- P501 : Dispose of contents/container in accordance with local regulation

Supplementary statements

- EUH208 : Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.
- EUH401 : To avoid risks to human health and the environment comply with the instructions for use.

Version	Changes	Date
Version 1	First version	January 20, 2023

This Safety Data Sheet is prepared in accordance with Commission Regulation (EU) No 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

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