

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
 Name : Triclopyr 480 g/L EC
 Trade name : TRIBEL

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

1.2.1. Relevant identified uses

Main use category : Professional use
 Industrial/Professional use spec : Plant protection products
 Use of the substance/mixture : Herbicide

1.2.2. Uses advised against

Restrictions on use : No known evidence against using

1.3. Details of the supplier of the safety data sheet

Arysta LifeScience Benelux
 Rue de Renory 26/1
 B-4102 Ougrée - Belgium
 T +32 (0)4 385 97 11
sds.info@upl-ltd.com - <http://www.upl-ltd.com/be>

1.4. Emergency telephone number

Emergency number : Europe/Rest of the world (English): +44(0)1235 239670

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Aspiration hazard, Category 1	H304
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Causes skin irritation. Causes serious eye damage. May be fatal if swallowed and enters airways. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Contains :

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Hazard statements (CLP) :

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H410 - Very toxic to aquatic life with long lasting effects.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Precautionary statements (CLP)	: P280 - Wear eye protection, protective clothing, protective gloves. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor/physician. P331 - Do NOT induce vomiting. P501 - Dispose of contents/container to Collection point.
EUH-statements	: EUH401 - To avoid risks to human health and the environment, comply with the instructions for use. EUH208 - Contains Triclopyr butoxy ethyl ester. May produce an allergic reaction.

2.3. Other hazards

Other hazards not contributing to the classification	: This mixture 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.
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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Triclopyr butoxy ethyl ester	(CAS-No.) 64700-56-7 (EC-No.) 265-024-8	61.6	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	(EC-No.) 926-141-6 (REACH-no) 01-2119456620-43; 01-219473977-17	> 20	Asp. Tox. 1, H304
Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt	(EC-No.) 932-231-6 (REACH-no) 01-2119560592-37	< 3	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412
butan-1-ol; n-butanol	(CAS-No.) 71-36-3 (EC-No.) 200-751-6 (EC Index-No.) 603-004-00-6 (REACH-no) 01-2119484630-38	< 2	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

Symptoms/effects after skin contact	: Irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Risk of lung oedema.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Take up liquid spill into absorbent material.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
Handling temperature	: Store at room temperature
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store locked up. Store in a well-ventilated place.
Maximum storage period	: 2 year(s)

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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow-brown.
Odour	: hydrocarbons.
Odour threshold	: No data available
pH	: 3.94 (1%)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 61 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.07 g/cm ³ (20°C)
Solubility	: Water: Emulsion
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: 6.98 mm ² /s (40°C)
Viscosity, dynamic	: No data available
Explosive properties	: The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

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LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 1.74 mg/l/4h

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat	> 5000 mg/m ³

Triclopyr butoxy ethyl ester (64700-56-7)

LD50 oral rat	803 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	> 4.8 mg/l/4h (MATC)

1-Butanol (71-36-3)

LD50 oral	2100 mg/kg
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LD50 dermal	3400 mg/kg
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Skin corrosion/irritation	: Causes skin irritation. pH: 3.94 (1%)
Serious eye damage/irritation	: Causes serious eye damage. pH: 3.94 (1%)
Respiratory or skin sensitisation	: Not classified.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.

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Viscosity, kinematic	6.98 mm ² /s (40°C)
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Very toxic to aquatic life with long lasting effects.

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LC50 fish	1 mg/l (96h)
EC50 Daphnia	0.4 mg/l (48h)
ErC50 (algae)	7.95 mg/l (72h)

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

LC50 fish	2.2 mg/l
EC50 Daphnia	> 1000 mg/l (48h Daphnia magna)
ErC50 (algae)	> 1000 mg/l (72h Pseudokirchneriella subcapitata)
NOEC (acute)	1000 mg/l (72h Pseudokirchneriella subcapitata)
NOEC (chronic)	1.22 mg/l (21d Daphnia magna)

Triclopyr butoxy ethyl ester (64700-56-7)

LC50 fish	0.36 mg/l (96h Lepomis macrochirus)
EC50 Daphnia	2.9 mg/l (48h Daphnia magna)
ErC50 (algae)	> 3 mg/l (96h Pseudokirchneriella subcapitata)

1-Butanol (71-36-3)

NOEC chronic crustacea	4.1 mg/l
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Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

12.2. Persistence and degradability

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Persistence and degradability	Readily biodegradable.
Biodegradation	69 % (28d OECD 301F)

12.3. Bioaccumulative potential

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Partition coefficient n-octanol/water (Log Pow)	not applicable
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Triclopyr butoxy ethyl ester (64700-56-7)

BCF fish	100 – 300
Partition coefficient n-octanol/water (Log Pow)	4.09 – 4.49

Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt

Partition coefficient n-octanol/water (Log Pow)	2.89 (20 °C, Test method EU A.8)
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12.4. Mobility in soil

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Surface tension	28 mN/m (25°C)
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Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Mobility in soil	Low
Surface tension	0.0257 N/m (25°C; EN 14370)

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
European List of Waste (LoW) code	: 02 01 08* - agrochemical waste containing dangerous substances

SECTION 14: Transport information




In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA
14.1. UN number		
UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name		
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (triclopyr)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (triclopyr)	Environmentally hazardous substance, liquid, n.o.s. (triclopyr)

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Transport document description		
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (triclopyr), 9, III, (E)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (triclopyr), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (triclopyr), 9, III
14.3. Transport hazard class(es)		
9	9	9
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes
No supplementary information available		

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 601
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	: 

Tunnel restriction code : E

Transport by sea

Special provisions (IMDG)	: 274, 335
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP2, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A

Air transport

PCA Excepted quantities (IATA) : E1

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provisions (IATA)	: A97, A158
ERG code (IATA)	: 9L

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Directive 2012/18/EU (SEVESO III)

Seveso Additional information : Directive 2012/18/EU (SEVESO III): E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:			
Section	Changed item	Change	Comments
	SDS Ref.	Added	
1.2	Industrial/Professional use spec	Modified	
1.2	Restrictions on use	Added	
7.2	Storage conditions	Modified	
13.1	European List of Waste (LoW) code	Added	

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1

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Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains Triclopjr butoxy ethyl ester. May produce an allergic reaction.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Skin Irrit. 2	H315	Expert judgment
Eye Dam. 1	H318	Expert judgment
Asp. Tox. 1	H304	Calculation method
Aquatic Acute 1	H400	On basis of test data
Aquatic Chronic 1	H410	Calculation method

Safety Data Sheet applicable for : EU - Europe regions

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.