

SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier

Product form : Mixture
 Name : Cypermethrin 20 g/L + Piperonyl Butoxyde 57 g/L ULV
 Trade name : TALISMA UL
 Product code : CA701021

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 : Insecticide

1.2.2. Uses advised against

No additional information available

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 - F +32 (0)4 385 97 49
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

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	

SECTION 2: Hazards identification
2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]

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

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) :



GHS09

CLP Signal word

: Warning

Hazard statements (CLP)

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

Precautionary statements (CLP)

: P102 - Keep out of reach of children.
 P270 - Do not eat, drink or smoke when using this product.
 P273 - Avoid release to the environment.
 P391 - Collect spillage.
 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.

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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Safety Data Sheet

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

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]
Piperonyl Butoxide	(CAS-No.) 51-03-6 (EC-No.) 200-076-7 (REACH-no) 01-2119537431-46	6.4	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
cypermethrin cis/trans +/-40/60; (RS)- α -cyano-3-phenoxybenzyl (1RS,3RS; 1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate	(CAS-No.) 52315-07-8 (EC-No.) 257-842-9 (EC Index-No.) 607-421-00-4	2.2	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 STOT SE 3, H335 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410 (M=1000)

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

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.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

No additional information available

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.

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. Wear personal protective equipment.
Handling temperature : $\geq 0^{\circ}\text{C}$
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

TALISMA UL

Safety Data Sheet

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

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place.
Storage temperature : $\geq -5^{\circ}\text{C}$

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:

Wear suitable gloves resistant to chemical penetration. Nitrile rubber gloves. Wear suitable gloves resistant to chemical penetration

Eye protection:

Face shield. Chemical goggles or safety glasses. Safety glasses

Skin and body protection:

Skin protection appropriate to the conditions of use should be provided

Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls:

Notify authorities if product enters sewers or public waters. Avoid release to the environment.

Other information:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: clear.
Colour	: Yellow.
Odour	: characteristic.
Odour threshold	: Not applicable Not applicable
pH	: No data available
Relative evaporation rate (butylacetate=1)	: Not applicable
Relative evaporation rate (ether=1)	: Not applicable
Melting point	: Not applicable
Freezing point	: $< 0^{\circ}\text{C}$
Boiling point	: Not applicable
Flash point	: $> 79^{\circ}\text{C}$ (CIPAC MT 12.2)
Auto-ignition temperature	: 252°C (EEC A.15)
Decomposition temperature	: Not applicable
Flammability (solid, gas)	: Not applicable
Vapour pressure	: Not applicable
Relative vapour density at 20°C	: No data available
Relative density	: 0.8933
Density	: 0.8933 g/ml (20°C ; CIPCA MT 3.2.1)
Solubility	: Not applicable.
Log Pow	: Not applicable
Viscosity, kinematic	: 7.6816 mm ² /s (20°C ; ASTM D445-53T)
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: No data available
Explosive limits	: Not applicable

TALISMA UL

Safety Data Sheet

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

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
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LD50 dermal rat	> 2000 mg/kg
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LC50 inhalation rat (mg/l)	> 5 mg/l/4h
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Cypermethrin cis/trans +/- 40/60 (52315-07-8)

LD50 oral rat	500 mg/kg
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LD50 dermal rat	> 2000 mg/kg
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LC50 inhalation rat (mg/l)	3.28 mg/l/4h
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Piperonyl Butoxide (51-03-6)

LD50 oral rat	4570 mg/kg
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LD50 dermal rabbit	> 2000 mg/kg
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LC50 inhalation rat (mg/l)	> 5.9 mg/l/4h
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Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Cypermethrin cis/trans +/- 40/60 (52315-07-8)

NOAEL (chronic, oral, animal/male, 2 years)	5 mg/kg bodyweight
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Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

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Viscosity, kinematic	7.6816 mm ² /s (20°C ; ASTM D445-53T)
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

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Safety Data Sheet

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

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

Cypermethrin cis/trans +/- 40/60 (52315-07-8)

LC50 fish	0.0028 mg/l/96h (Salmo gairdneri)
EC50 Daphnia	0.0003 mg/l/48h (Daphnia magna)
ErC50 (algae)	> 0.1 mg/l/96h (Selenastrum capricornutum)
NOEC chronic fish	0.00003 mg/l (34 days, Pimephales promelas)
NOEC chronic crustacea	0.00004 mg/l (21 days, Daphnia magna)

Piperonyl Butoxide (51-03-6)

LC50 fish	3.94 mg/l (96h Cyprinodon variegatus)
EC50 Daphnia	0.51 mg/l (48h Daphnia magna)
EC50 72h algae (1)	2.09 mg/l Selenastrum capricornutum
ErC50 (algae)	3.89 mg/l (72h Selenastrum capricornutum)

12.2. Persistence and degradability

Cypermethrin cis/trans +/- 40/60 (52315-07-8)

Persistence and degradability	Not readily biodegradable.
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Piperonyl Butoxide (51-03-6)

Persistence and degradability	Not readily biodegradable.
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12.3. Bioaccumulative potential

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Log Pow	Not applicable
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Cypermethrin cis/trans +/- 40/60 (52315-07-8)

BCF fish	1204 mg/l (Salmo gairdneri)
Log Pow	5.3 - 5.6 (25°C)

Piperonyl Butoxide (51-03-6)

Log Pow	4.8
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12.4. Mobility in soil

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Surface tension	31.2 mN/m (25°C ; EEC A.5)
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Piperonyl Butoxide (51-03-6)

Ecology - soil	Low mobility (soil).
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12.5. Results of PBT and vPvB assessment

Component

Cypermethrin cis/trans +/- 40/60 (52315-07-8)	PBT/vPvB assessment not available as chemical safety assessment not conducted
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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 : 07 04 04* - other organic solvents, washing liquids and mother liquors

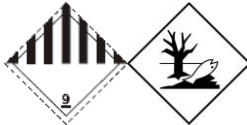
SECTION 14: Transport information

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

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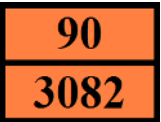
Safety Data Sheet

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

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.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.
Transport document description		
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cypermethrin, PBO), 9, III, (E)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cypermethrin, PBO), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Cypermethrin, PBO), 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

TALISMA UL

Safety Data Sheet

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

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
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.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

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
	Extra phrases	Modified	
9.1	Boiling point	Added	
9.1	Decomposition temperature	Added	
9.1	Relative evaporation rate (butylacetate=1)	Added	
9.1	Odour threshold (ppm)	Added	
9.1	Odour threshold (mg/m³)	Added	
9.1	Log Pow	Added	
9.1	Explosive limits (vol %)	Added	
9.1	Solubility	Added	
9.1	Vapour pressure	Added	
9.1	Relative evaporation rate (ether=1)	Added	
12.3	Log Pow	Added	

TALISMA UL

Safety Data Sheet

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

15.1	REACH Annex XVII	Removed	
15.1	Other information, restriction and prohibition regulations	Added	

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
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
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
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]:

Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	Calculation method

Safety Data Sheet applicable for regions : EU - Europe;IE - Ireland

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.