

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

ASTRAL Duralong

Version: 1
Revision date: 16/01/2017



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SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING.

1.1 Product identifier.

Product Name: ASTRAL Duralong

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

Desinfectant-algaecide-flocculant

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company: **FLUIDRA COMMERCIAL, S.A.U.**
Address: Avda. Francesc Macià, 60, 20^a planta
City: 08208 Sabadell
Province: (Barcelona) Spain
Telephone: Tel: +34 93 724 39 00
Fax: Fax: +34 93 724 29 93
E-mail: clientes@fluidra.es
Web: www.astralpool.com

1.4 Emergency telephone number:

Anti poisoning centre:

ITALY (Rome): 06/305 43 43

ITALY (Milan): 02/66 10 10 29

SPAIN: +34 91 562 04 20

FRANCE (Paris): 01 40 05 48 48

FRANCE (Toulouse): 05 61 77 74 47

FRANCE (Marseille): 04 91 75 25 25

PORTUGAL: 808 250 143

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the mixture.

In accordance with Regulation (EU) No 1272/2008:

Acute Tox. 4 : Harmful if swallowed.

Aquatic Acute 1 : Very toxic to aquatic life.

Aquatic Chronic 1 : Very toxic to aquatic life with long lasting effects.

Eye Irrit. 2 : Causes serious eye irritation.

STOT SE 3 : May cause respiratory irritation.

2.2 Label elements.

Labelling in accordance with Regulation (EU) No 1272/2008:

Pictograms:



Signal Word:

Warning

H statements:

H302

Harmful if swallowed.

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H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.

P statements:

P261	Avoid breathing dust.
P271	Use only outdoors or in a well-ventilated area.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P264	Wash hands thoroughly after handling.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P102	Keep out of reach of children.
P405	Store locked up.
P273	Avoid release to the environment.
P391	Collect spillage.
P501	Dispose of contents/container in accordance with applicable regulations.

EUH statements:

EUH031	Contact with acids liberates toxic gas.
EUH206	Warning! Do not use together with other products. May release dangerous gases (chlorine).

Contains:

symclosene
copper sulphate pentahydrate

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Not Applicable.

3.2 Mixtures.

Substances posing a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, assigned a Community exposure limit in the workplace, and classified as PBT/vPvB or included in the Candidate List:

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
			Classification	specific concentration limit
Index No: 613-031-00-5 CAS No: 87-90-1 EC No: 201-782-8	symclosene	90 - 100 %	Acute Tox. 4 *, H302 - Aquatic Acute 1, H400 - Aquatic Chronic 1, H410 - Eye Irrit. 2, H319 - Ox. Sol. 2, H272 - STOT SE 3, H335	, :
Index No: 005-007-00-2 CAS No: 10043-35-3 EC No: 233-139-2 Registration No: 01-2119486683-25-XXXX	boric acid	2.5 - 5.5 %	Repr. 1B, H360FD	Repr. 1B, H360FD: C ≥ 5,5 %
CAS No: 10043-01-3 EC No: 233-135-0 Registration No: 01-2119531538-36-XXXX	Aluminiumsulfate	1 - 3 %	Eye Dam. 1, H318	-

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CAS No: 7758-99-8 EC No: 231-847-6	copper sulphate pentahydrate	0.25 - 2.5 %	Acute Tox. 4 *, H302 - Aquatic Acute 1, H400 - Aquatic Chronic 1, H410 - Eye Irrit. 2, H319 - Skin Irrit. 2, H315	-
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(*) The complete text of the H phrases is given in section 16 of this Safety Data Sheet.

* See Regulation (EC) No. 1272/2008, Annex VI, section 1.2.

[1] Substance with a Community workplace exposure limit (see section 8.1).

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration. Do not administer anything orally. If unconscious, place them in a suitable position and seek medical assistance.

Eye contact.

If wearing contact lenses, remove them. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact.

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. **NEVER** use solvents or thinners.

Ingestion.

If accidentally ingested, seek immediate medical attention. Keep calm. **NEVER** induce vomiting.

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

Irritant Product, repeated or prolonged contact with skin or mucous membranes can cause redness, blisters or dermatitis, inhalation of spray mist or particles in suspension may cause irritation of the respiratory tract, some symptoms may not be immediate. Can cause allergic reactions.

Harmful Product, prolonged exposure due to inhalation may cause anaesthetic effects and the need for immediate medical assistance.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

SECTION 5: FIREFIGHTING MEASURES.

The product does not present any particular risk in case of fire.

5.1 Extinguishing media.

Recommended extinguishing methods.

Extinguisher powder or CO₂. In case of more serious fires, also alcohol-resistant foam and water spray. Do not use a direct stream of water to extinguish.

5.2 Special hazards arising from the mixture.

Special risks.

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways.

Fire protection equipment.

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According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Product dangerous for the environment, in case of large spills or if the product contaminates lakes, rivers, or sewers, inform the responsible authorities according to local legislation. Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3 Methods and material for containment and cleaning up.

The contaminated area should be immediately cleaned with an appropriate de-contaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

For personal protection, see section 8. Never use pressure to empty the containers. They are not pressure-resistant containers.

In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Observe indications on the label. Store the containers between 5 and 35° C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorized persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

Classification and threshold amount of storage in accordance with Annex I to Directive 2012/18/EU (SEVESO III)::

Code	Description	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
E1	ENVIRONMENTAL HAZARDS - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1	100	200

7.3 Specific end use(s).

None in particular.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values. The product does NOT contain substances with Biological Limit Values.

Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Type	Value
boric acid N. CAS: 10043-35-3 N. CE: 233-139-2	DNEL (Workers)	Inhalation, Long-term, Systemic effects	8,3 (mg/m ³)

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Aluminiumsulfate N. CAS: 10043-01-3 N. CE: 233-135-0	DNEL (Workers)	Dermal, Long-term, Local effects	10 (mg/kg)
	DNEL (General population)	Oral, Long-term, Systemic effects	5 (mg/kg)
	DNEL (Workers)	Dermal, Long-term, Systemic effects	1,8 (mg/m ³)

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

Concentration levels PNEC:

Name	Details	Value
Aluminiumsulfate N. CAS: 10043-01-3 N. CE: 233-135-0	Water (freshwater)	34,6 (mg/kg)
	Sediment (marine water)	3,46 (mg/kg)
	Soil	33,1 (mg/kg)

PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.

CAS: 87-90-1

TLV TWA - 0.5 ppm (1.5 mg/m³) Cl gas

TLV STEL - 1 ppm (3.0 mg/m³) Cl gas




CAS: 10043-01-3

TLV TWA - 2 mg/m³ (Al)

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %		
Uses:	Desinfectant-algaecide-flocculant		
Breathing protection:			
If the recommended technical measures are observed, no individual protection equipment is necessary.			
Hand protection:			
PPE:	Protective gloves against chemicals.		
Characteristics:	«CE» marking, category III.		
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420		
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.		
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.		
Material:	PVC (polyvinyl chloride)	Breakthrough time (min.):	> 480
		Material thickness (mm):	0,35
Eye protection:			
PPE:	Protective goggles against particle impacts.		
Characteristics:	«CE» marking, category II. Eye protector against dust and smoke.		
CEN standards:	EN 165, EN 166, EN 167, EN 168		
Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions.		
Observations:	Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.		
Skin protection:			
PPE:	Anti-static protective clothing.		
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.		
CEN standards:	EN 340, EN 1149-1, EN 1149-2, EN 1149-3, EN 1149-5		
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.		
Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.		


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PPE:	Anti-static safety footwear.	
Characteristics:	«CE» marking, category II.	
CEN standards:	EN ISO 13287, EN ISO 20344, EN ISO 20346	
Maintenance:	The footwear should be checked regularly	
Observations:	The level of comfort during use and acceptability are factors that are assessed very differently depending on the user. Therefore, it is advisable to try on different footwear models and, if possible, different widths.	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance: Tablets
Colour: White and blue
Odour: Similar to bleach
Odour threshold: N.A./N.A.
pH: 2,1 - 3 (1%)
Melting point: > 230 °C
Boiling Point: N.A./N.A.
Flash point: N.A./N.A.
Evaporation rate: N.A./N.A.
Inflammability (solid, gas): > 250 °C
Lower Explosive Limit: N.A./N.A.
Upper Explosive Limit: N.A./N.A.
Vapour pressure: N.A./N.A.
Vapour density: N.A./N.A.
Relative density: N.A./N.A.
Solubility: N.A./N.A.
Liposolubility: N.A./N.A.
Hydrosolubility: N.A./N.A.
Partition coefficient (n-octanol/water): N.A./N.A.
Auto-ignition temperature: N.A./N.A.
Decomposition temperature: N.A./N.A.
Viscosity: N.A./N.A.
Explosive properties: N.A./N.A.
Oxidizing properties: No

N.A./N.A. = Not Available/Not Applicable due to the nature of the product

9.2 Other information.

Pour point: N.A./N.A.
Blink: N.A./N.A.
Kinematic viscosity: N.A./N.A.
N.A./N.A. = Not Available/Not Applicable due to the nature of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

Contact with acids liberates toxic gas.

10.2 Chemical stability.

Unstable in contact with:
- Bases.

10.3 Possibility of hazardous reactions.

Warning! Do not use together with other products. May release dangerous gases (chlorine).
Neutralization can occur on contact with bases.

10.4 Conditions to avoid.

- Avoid contact with bases.

10.5 Incompatible materials.

Avoid the following materials:

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- Bases.

10.6 Hazardous decomposition products.

Depending on conditions of use, can be generated the following products:

- Corrosive vapors or gases.

SECTION 11: TOXICOLOGICAL INFORMATION.

IRRITANT PREPARATION. Splatters in the eyes can cause irritation.

IRRITANT PREPARATION. The inhalation of spray mist or suspended particulates can irritate the respiratory tract. It can also cause serious respiratory difficulties, central nervous system disorders, and in extreme cases, unconsciousness.

11.1 Information on toxicological effects.

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Splatters in the eyes can cause irritation and reversible damage.

Toxicological information about the substances present in the composition.

Name	Acute toxicity			
	Type	Test	Kind	Value
symclosene CAS No: 87-90-1 EC No: 201-782-8	Oral	LD50 [1] EPA OPP 81-1	Rat	490 mg/kg [1]
	Dermal	LD50 [1] EPA OPP 81-2	Rabbit	>2000 mg/kg [1]
	Inhalation			
boric acid CAS No: 10043-35-3 EC No: 233-139-2	Oral	LD50 LD50 [1] JAMA, Journal of the American Medical Association. Vol. 128, Pg. 266, 1945	Rat Rat	3500-4100 mg/kg 2660 mg/kg bw [1]
	Dermal	LD50	Rabbit	>2000 mg/kg
	Inhalation	LC50	Rat	> 2 mg/l
Aluminiumsulfate CAS No: 10043-01-3 EC No: 233-135-0	Oral	LD50 [1] OCDE 401	Rat	>2000 mg/kg [1]
	Dermal	LD50 [1] OCDE 402	Rabbit	>5000 mg/kg [1]
	Inhalation			

a) acute toxicity;

Product classified:

Acute toxicity (Oral), Category 4: Harmful if swallowed.

Acute Toxicity Estimate (ATE):

Mixtures:

ATE (Oral) = 538 mg/kg

b) skin corrosion/irritation;

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

c) serious eye damage/irritation;

Product classified:

Eye irritation, Category 2: Causes serious eye irritation.

d) respiratory or skin sensitisation;

Not conclusive data for classification.

e) germ cell mutagenicity;

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Not conclusive data for classification.

f) carcinogenicity;

Not conclusive data for classification.

g) reproductive toxicity;

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

h) STOT-single exposure;

Product classified:

Specific target organ toxicity following a single exposure, Category 3:

i) STOT-repeated exposure;

Not conclusive data for classification.

j) aspiration hazard;

Not conclusive data for classification.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

Name	Ecotoxicity			
	Type	Test	Kind	Value
symclosene CAS No: 87-90-1 EC No: 201-782-8	Fish	LC50	Fish	0.32 mg/l (96h)
	Aquatic invertebrates	LC50	Daphnia	0.21 mg/l (48h)
	Aquatic plants			
boric acid CAS No: 10043-35-3 EC No: 233-139-2	Fish	LC50	Fish	74 mg/l (96 h)
		LC50	Fish	487 mg/l (96 h) [1]
	[1] Hamilton, S.J., and K.J. Buhl 1990. Acute Toxicity of Boron, Molybdenum, and Selenium to Fry of Chinook Salmon and Coho Salmon. Arch.Environ.Contam.Toxicol. 19(3):366-373. Hamilton, S.J. 1995. Hazard Assessment of Inorganics to Three Endangered Fish in the Green River, Utah. Ecotoxicol.Environ.Saf. 30(2):134-142	Aquatic invertebrates	LC50	Daphnia
LC50	Crustacean		180 mg/l (48 h) [1]	
[1] Gersich, F.M. 1984. Evaluation of a Static Renewal Chronic Toxicity Test Method for Daphnia magna Straus Using Boric Acid. Environ.Toxicol.Chem. 3(1):89-94. Lewis, M.A., and L.C. Valentine 1981. Acute and Chronic Toxicities of Boric Acid to Daphnia magna Straus. Bull.Environ.Contam.Toxicol. 27(3):309-315	Aquatic plants			
Aluminiumsulfate CAS No: 10043-01-3 EC No: 233-135-0	Fish	LC50	Fish	> 1000 mg/l (96 h)
	Aquatic invertebrates	LC50	Daphnia	> 160 mg/l (48h)
	Aquatic plants			

12.2 Persistence and degradability.

No information is available about persistence and degradability of the product.

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12.3 Bioaccumulative potencial.

No information is available regarding the bioaccumulation of the substances present.

12.4 Mobility in soil.

No information is available about the mobility in soil.
The product must not be allowed to go into sewers or waterways.
Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13 DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.
Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.

Land: Transport by road: ADR, Transport by rail: RID.

Transport documentation: Consignment note and written instructions

Sea: Transport by ship: IMDG.

Transport documentation: Bill of lading

Air: Transport by plane: ICAO/IATA.

Transport document: Airway bill.

14.1 UN number.

UN No: UN3077

14.2 UN proper shipping name.

Description:

ADR: UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS SYMCLOSENE), 9, PG III, (E)

IMDG: UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS SYMCLOSENE), 9, PG III, MARINE POLLUTANT

ICAO: UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS SYMCLOSENE), 9, PG III

14.3 Transport hazard class(es).

Class(es): 9

14.4 Packing group.

Packing group: III

14.5 Environmental hazards.

Marine pollutant: Yes



Dangerous for the environment

14.6 Special precautions for user.

Labels: 9

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Hazard number: 90
ADR LQ: 5 kg
IMDG LQ: 5 kg
ICAO LQ: 30 kg B

Provisions concerning carriage in bulk ADR:

VC1 Carriage in bulk in sheeted vehicles, sheeted containers or sheeted bulk containers is permitted.

VC2 Carriage in bulk in closed vehicles, closed containers or closed bulk containers is permitted.

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-A,S-F

Proceed in accordance with point 6.

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

The product is not transported in bulk.

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): E1

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles:

Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
30. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as toxic to reproduction category 1A or 1B (Table 3.1) or toxic to reproduction category 1 or 2 (Table 3.2) and listed as follows: - Reproductive toxicant category 1A adverse effects on sexual function and fertility or on development (Table 3.1) or reproductive toxicant category 1 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 5 - Reproductive toxicant category 1B adverse effects on sexual function and fertility or on development (Table 3.1) or reproductive toxicant category 2 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 6	1. Shall not be placed on the market, or used, - as substances, - as constituents of other substances, or, - in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: - either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or, - the relevant concentration specified in Directive 1999/45/EC where no specific concentration limit is set out in Part 3 of Annex VI to Regulation (EC) No 1272/2008. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows: 'Restricted to professional users'. 2. By way of derogation, paragraph 1 shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) the following fuels and oil products: - motor fuels which are covered by Directive 98/70/EC, - mineral oil products intended for use as fuel in mobile or fixed combustion plants, - fuels sold in closed systems (e.g. liquid gas bottles); (d) artists' paints covered by Directive 1999/45/EC;

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	(e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date.
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15.2 Chemical safety assessment.

There has been no evaluation a chemical safety assessment of the product.

SECTION 16: OTHER INFORMATION.

Complete text of the H phrases that appear in section 3:

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H360FD	May damage fertility. May damage the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Classification codes:

Acute Tox. 4 [Oral] : Acute toxicity (Oral), Category 4
Aquatic Acute 1 : Acute toxicity to the aquatic environment, Category 1
Aquatic Chronic 1 : Chronic effect to the aquatic environment, Category 1
Eye Dam. 1 : Serious eye damage, Category 1
Eye Irrit. 2 : Eye irritation, Category 2
Ox. Sol. 2 : Oxidising solid, Category 2
Repr. 1B : Reproductive toxicant, Category 1B
Skin Irrit. 2 : Skin irritant, Category 2
STOT SE 3 : Specific target organ toxicity following a single exposure, Category 3

Sections changed compared with the previous version:

1,2,3,4,5,6,8,11,12,14,16

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Information on the TSCA Inventory (Toxic Substances Control Act) USA:

CAS No	Name	State
87-90-1	symclosene	Registered
10043-35-3	boric acid	Registered
10043-01-3	Aluminiumsulfate	Registered
7758-99-8	copper sulphate pentahydrate	

Abbreviations and acronyms used:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
CEN: European Committee for Standardization.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.
DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
EC50: Half maximal effective concentration.
PPE: Personal protection equipment.
IATA: International Air Transport Association.
ICAO: International Civil Aviation Organization.

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SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)



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IMDG: International Maritime Code for Dangerous Goods.
LC50: Lethal concentration, 50%.
LD50: Lethal dose, 50%.
PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.

Key literature references and sources for data:

<http://eur-lex.europa.eu/homepage.html>

<http://echa.europa.eu/>

Regulation (EU) 2015/830.

Regulation (EC) No 1907/2006.

Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.