# SAFETY DATA SHEET
(in accordance with Regulation (EU) 2020/878)

# ctx391 Multi Action 10



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

**1.1 Product identifier.**

Product Name: ctx391 Multi Action 10

**1.2 Relevant identified uses of the substance or 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 COMERCIAL ESPAÑA** |
| Address: | Av. Alcalde Barnils, 69 |
| City: | 08174 Sant Cugat del Vallès |
| Province: | Barcelona (España) |
| Telephone: | telf: 902 42 32 22 |
| Fax: | +34 93 713 41 11 |
| E-mail: | fds@inquide.com |
| Web: | www.ctxprofessional.com |

**1.4 Emergency telephone number:** (Available 24 hours)
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 (Tolousse): 05 61 77 74 47 FRANCE (Marseille): 04 91 75 25 25
PORTUGAL: 808 250 143
BELGIQUE (Brussel): (+34) 070 245 245
CAV accreditati: Roma +39 06 68 59 3726; Foggia +39 800 18 34 59; Napoli +39 081 54 53 333; Roma +39 06 49 97 80 00; Roma +39 06 30 54 343; Firenze +39 055 79 47 819; Pavia +39 0382 24 444; Milano +39 02 66 10 10 29; Bergamo +39 800 88 33 00; Verona +39 800 01 18 58.

## SECTION 2: HAZARDS IDENTIFICATION.

**2.1 Classification of the substance or 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.
STOT SE 3 : May cause respiratory irritation.
STOT SE 3 : May cause drowsiness or dizziness.
Eye Dam. 1 : Causes serious eye damage.

**2.2 Label elements.**
**Labelling in accordance with Regulation (EU) No 1272/2008:**
Pictograms:

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Signal Word:

**Danger**

Hazard statements:

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H318 | Causes serious eye damage. |
| H335 | May cause respiratory irritation. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary 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. |
| 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
boric acid
copper sulphate
Aluminium sulphate

Active substances:
symclosene, 83,5%;
copper sulphate pentahydrate, 0,5%;

**2.3 Other hazards.**

The mixture does not contain substances classified as PBT.
The mixture does not contain substances classified as vPvB.
The mixture does not contain any endocrine disrupting properties substances.

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 |
|---|---|---|---|

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| | | | Classification | Specifics concentration limits and Acute toxicity estimate |
|---|---|---|---|---|
| Index No: 613-031-00-5<br>CAS No: 87-90-1<br>EC No: 201-782-8 | symclosene | 30 - 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<br>CAS No: 10043-35-3<br>EC No: 233-139-2<br>Registration No: 01-2119486683-25-XXXX | [5] boric acid | 0.1 - 0.29 % | Repr. 1B, H360FD | Repr. 1B, H360FD: C ≥ 5,5 % |
| Index No: 029-004-00-0<br>CAS No: 7758-98-7<br>EC No: 231-847-6<br>Registration No: 01-2119520566-40-XXXX | copper sulphate | 0.25 - 1 % | Acute Tox. 4 *, H302 - Aquatic Acute 1, H400 - Aquatic Chronic 1, H410 - Eye Irrit. 2, H319 - Skin Irrit. 2, H315 | - |
| CAS No: 10043-01-3<br>EC No: 233-135-0<br>Registration No: 01-2119531538-36-XXXX | [2] Aluminium sulphate | 1 - 3 % | Eye Dam. 1, H318 - Met. Corr. 1, H290 | - |

(*) *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.*
*[2] Substance with a national workplace exposure limit (see section 8.1).*
*[5] Substance included in the list established under Article 59, paragraph 1, REACH (Candidate substance).*

## 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.**
Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance. Dont let the person to rub the affected eye.

**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.**
Corrosive Product, contact with eyes or skin can cause burns; ingestion or inhalation can cause internal damage, if this occurs immediate medical assistance is required.

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

**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. Do not induce vomiting. If the person vomits, clear the respiratory tract.

## SECTION 5: FIREFIGHTING MEASURES.

The product is NOT classified as flammable, in case of fire the following measures should be taken:

**5.1 Extinguishing media.**
**Suitable extinguishing media:**
Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

**Unsuitable extinguishing media:**
Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.
Suitable extinguishing media: CO2 in small fires and water in large quantities (small amounts of water may aggravate the situation)
Unsuitable extinguishing media: Dry powder, Halogenated hydrocarbon, ABC powder.
**5.2 Special hazards arising from the substance or mixture.**
**Special risks.**
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. Product residues and extinguishing media may contaminate the aquatic environment.

**Fire protection equipment.**
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 boots.

## 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.**
Contain and collect spillage with inert absorbent material (earth, sand, vermiculite, Kieselguhr...) and clean the area immediately with a suitable decontaminant.
Deposit waste in closed and suitable containers for disposal, in compliance with local and national regulations (see section 13).

**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.

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**7.1 Precautions for safe handling.**
For personal protection, see section 8.
In the application area, smoking, eating, and drinking must be prohibited.
Follow legislation on occupational health and safety.
Never use pressure to empty the containers. They are not pressure-resistant containers. 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 25 º 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-authorised 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):

| | | Qualifying quantity (tonnes) for the application of | |
|---|---|---|---|
| **Code** | **Description** | **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).**
PH regulator for swimming pool water

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

**8.1 Control parameters.**

Work exposure limit for:

| Name | CAS No. | Country | Limit value | ppm | mg/m³ |
|---|---|---|---|---|---|
| Aluminium sulphate | 10043-01-3 | Éire [1] | **Eight hours** | | 2 |
| | | | **Short term** | | |

*[1] According Code of Practice for the Safety, Health and Welfare at Work (Chemicals Agents) Regulations adopted by Health and Safety Authority (HSA).*
The product does NOT contain substances with Biological Limit Values.
Concentration levels DNEL/DMEL:

| Name | DNEL/DMEL | Type | Value |
|---|---|---|---|
| boric acid<br>CAS No: 10043-35-3<br>EC No: 233-139-2 | DNEL<br>(Workers) | Inhalation, Chronic, Systemic effects | 8,3<br>(mg/m³) |

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 |
|---|---|---|
| copper sulphate<br>CAS No: 7758-98-7<br>EC No: 231-847-6 | aqua (freshwater) | 7,8 (µg/L) |
| | aqua (marine water) | 5,2 (µg/L) |
| | STP | 230 (µg/L) |
| | sediment (freshwater) | 87 (mg/kg sediment dw) |
| | sediment (marine water) | 676 (mg/kg sediment dw) |

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| | | |
|---|---|---|
| | soil | 65 (mg/kg soil dw) |

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
**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:** | | | |
| PPE: | Particle filter mask | | |
| Characteristics: | «CE» marking, category III. Made of filtering material, it covers nose, mouth and chin. | | |
| CEN standards: | EN 149 | | |
| Maintenance: | Check for any tears, defects, etc. before use. Since it is disposable individual protection equipment, it should be replaced after use. | | |
| Observations: | Does not protect worker unless properly adjusted. Follow the manufacturer's instructions regarding suitable use of the equipment. | | |
| Filter Type needed: | P2 | | |
| **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. | | |
| PPE: | Anti-static safety footwear. | | |
| Characteristics: | «CE» marking, category II. | | |

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| | |
|---|---|
| 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.**
Physical state: Solid
Colour: White anb blue
Odour: Similar to bleach
Odour threshold: Not applicable/Not available due to the nature/properties of the product
Melting point: > 230 ºC descompone
Freezing point: Not applicable/Not available due to the nature/properties of the product
Boiling point or initial boiling point and boiling range: 255 ºC (Estimation based on the indication of the Regulation (CE) Nº1272/2008.)
Flammability: > 250 ºC
Lower explosion limit: Not applicable/Not available due to the nature/properties of the product
Upper explosion limit: Not applicable/Not available due to the nature/properties of the product
Flash point: 122 ºC (Estimation based on the indication of the Regulation (CE) Nº1272/2008.)
Auto-ignition temperature: Not applicable/Not available due to the nature/properties of the product
Decomposition temperature: Not applicable/Not available due to the nature/properties of the product
pH: 2,1 - 3 (1%)
Kinematic viscosity: Not applicable/Not available due to the nature/properties of the product
Solubility: Not applicable/Not available due to the nature/properties of the product
Hydrosolubility: Not applicable/Not available due to the nature/properties of the product
Liposolubility: Not applicable/Not available due to the nature/properties of the product
Partition coefficient n-octanol/water (log value): Not applicable/Not available due to the nature/properties of the product
Vapour pressure: 0,531 (Estimation based on the indication of the Regulation (CE) Nº1272/2008.)
Absolute density: Not applicable/Not available due to the nature/properties of the product
Relative density: 1,469 (Estimation based on the indication of the Regulation (CE) Nº1272/2008.)
Relative vapour density: Not applicable/Not available due to the nature/properties of the product
Particle characteristics: Not applicable/Not available due to the nature/properties of the product

**9.2 Other information**
Viscosity: Not applicable/Not available due to the nature/properties of the product
Explosive properties: Not applicable/Not available due to the nature/properties of the product
Oxidizing properties: Si
Dropping point: Not applicable/Not available due to the nature/properties of the product
Blink: Not applicable/Not available due to the nature/properties 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.

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**10.5 Incompatible materials.**
Avoid the following materials:
- 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 MIXTURE. 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 hazard classes as defined in Regulation (EC) Nº 1272/2008.**
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<br><br>CAS No: 87-90-1 EC No: 201-782-8 | Oral | LD50 | Rat | 490 mg/kg [1]<br><br>[1] EPA OPP 81-1 |
| | Dermal | LD50 | Rabbit | >2000 mg/kg [1]<br><br>[1] EPA OPP 81-2 |
| | Inhalation | | | |
| boric acid<br><br>CAS No: 10043-35-3 EC No: 233-139-2 | Oral | LD50<br>LD50 | Rat<br>Rat | 3500-4100 mg/kg<br>2660 mg/kg bw [1]<br><br>[1] JAMA, Journal of the American Medical Association. Vol. 128, Pg. 266, 1945 |
| | Dermal | LD50 | Rabbit | >2000 mg/kg |
| | Inhalation | LC50 | Rat | > 2 mg/l |
| copper sulphate<br><br>CAS No: 7758-98-7 EC No: 231-847-6 | Oral | LD50 | Rat | 482 mg/kg bw [1]<br><br>[1] Agricultural Chemicals, Thomson, W.T., 4 vols., Fresno, CA, Thomson Publications, 1976/77 revisionVol. 2, Pg. 182, 1977 |
| | Dermal | LD50 | Rat | 2000 mg/kg [1]<br><br>[1] Nippon Noyaku Gakkaishi. Journal of the Pesticide Science Society of Japan. Vol. 18, Pg. S161, 1993. |
| | Inhalation | | | |
| Aluminium sulphate<br><br>CAS No: 10043-01-3 EC No: 233-135-0 | Oral | LD50 | Rat | >2000 mg/kg [1]<br><br>[1] OECD 401 |
| | Dermal | LD50 | Rabbit | >5000 mg/kg [1]<br><br>[1] OECD 402 |
| | Inhalation | | | |

a) acute toxicity;
Product classified:
Acute toxicity (Oral), Category 4: Harmful if swallowed.

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b) skin corrosion/irritation;
Based on available data, the classification criteria are not met.

c) serious eye damage/irritation;
Product classified:
Serious eye damage, Category 1: Causes serious eye damage.

d) respiratory or skin sensitisation;
Not conclusive data for classification.

e) germ cell mutagenicity;
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: May cause respiratory irritation.

i) STOT-repeated exposure;
Not conclusive data for classification.

j) aspiration hazard;
Not conclusive data for classification.

**11.2 Information on other hazards.**
**Endocrine disrupting properties**
This product does not contain components with endocrine-disrupting properties with effects on human health.
**Other information**
There is no information available on other adverse health effects.

## SECTION 12: ECOLOGICAL INFORMATION.

**12.1 Toxicity.**

| Name | Ecotoxicity | | | |
|---|---|---|---|---|
| | Type | Test | Kind | Value |
| symclosene<br>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 | Fish | LC50<br>LC50 | Fish<br>Fish | 74 mg/l (96 h)<br>487 mg/l (96 h) [1]<br>[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<br>LC50 | Daphnia<br>Crustacean | 133 mg/l (48 h)<br>180 mg/l (48 h) [1] |

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| | | |
|---|---|---|
| | | [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 |
| CAS No: 10043-35-3 EC No: 233-139-2 | Aquatic plants | |
| copper sulphate<br>CAS No: 7758-98-7 EC No: 231-847-6 | Fish | LC50 Fish 0,89 mg/l (96 h) [1]<br>[1] Soucek, D.J., and G.P. Noblet 1998. Copper Toxicity to the Endoparasitic Trematode (Posthodiplostomum minimum) Relative to Physid Snail and Bluegill Sunfish Intermediate Hosts. Environ.Toxicol.Chem. 17(12):2512-2516 |
| | Aquatic invertebrates | LC50 Crustacean 0,04 mg/l (48 h) [1]<br>[1] McWilliam, R.A., and D.J. Baird 2002. Postexposure Feeding Depression: A new Toxicity Endpoint for Use in Laboratory Studies with Daphnia magna. Environ.Toxicol.Chem. 21(6):1198-1205 |
| | Aquatic plants | EC50 Algae 0,02 mg/l (96 h) [1]<br>[1] Murray-Gulde, C.L., J.E. Heatley, A.L. Schwartzman, and J.H. Rodgers Jr. 2002. Algicidal Effectiveness of Clearigate, Cutrine-Plus, and Copper Sulfate and Margins of Safety Associated with Their Use. Arch.Environ.Contam.Toxicol. 43(1):19-27 |
| Aluminium sulphate<br>CAS No: 10043-01-3 EC No: 233-135-0 | Fish | LC50 Fish 1 mg/l (96h) [1]<br>[1] OECD 203 |
| | Aquatic invertebrates | EC50 Daphnia >0.175 mg/l (48h) [1]<br>[1] OECD202 |
| | Aquatic plants | |

**12.2 Persistence and degradability.**
No information is available regarding the biodegradability of the substances present.
No information is available on the degradability of the substances present.
No information is available about persistence and degradability of the product.

**12.3 Bioaccumulative potential.**
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 Endocrine disrupting properties.**
This product doesn't contain components with environmental endocrine disrupting properties.

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

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## 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 or ID number.**
UN No: UN3077

**14.2 UN proper shipping name.**
Description:
ADR/RID: UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS SYMCLOSENE), 9, PG III, (-)
IMDG: UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS SYMCLOSENE), 9, PG III, MARINE POLLUTANT
ICAO/IATA: 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
Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-A,S-F

**14.6 Special precautions for user.**
Labels: 9


Hazard number: 90
ADR LQ: 5 kg

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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.
Proceed in accordance with point 6.

**14.7 Maritime transport in bulk according to IMO instruments.**
The product is not transported in bulk.

## SECTION 15: REGULATORY INFORMATION.

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

Information related to Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products:

| Product Type | Group |
|---|---|
| Disinfectants and algaecides not intended for direct application to humans or animals | Disinfectants |

| Active substances | Concentration % |
|---|---|
| symclosene<br>CAS No: 87-90-1<br>EC No: 201-782-8 | 83,5 |
| copper sulphate pentahydrate<br>CAS No: 7758-99-8<br>EC No: 231-847-6 | 0,5 |

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

Kind of pollutant to water (Germany): nwg: Non-hazardous to water. (Autoclassified according to the AwSV Regulations)

**15.2 Chemical safety assessment.**
No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16: OTHER INFORMATION.

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

H272 May intensify fire; oxidiser.
H290 May be corrosive to metals.
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:

*-Continued on next page.-*

Acute Tox. 4 : 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
Met. Corr. 1 : Corrosive to metals, Category 1
Ox. Sol. 2 : Oxidising solid, Category 2
Repr. 1B : Reproductive toxicant, Category 1B
STOT SE 3 : Specific target organ toxicity following a single exposure, Category 3
Skin Irrit. 2 : Skin irritant, Category 2

Changes regarding to the previous version:

- Modification of specific hazards (SECTION 2.3).
- Changes in the composition of the product (SECTION 3.2).
- Modification in the firefighting measures (SECTION 5.2).
- Modifications in the accidental release measures (SECTION 6.1).
- Modifications in the accidental release measures (SECTION 6.2).
- Modification in the values of the physical and chemical properties (SECTION 9).
- Modification of toxicity values (SECTION 11.1).
- Change in the hazard classification (SECTION 11.1).
- Modification of ecological information values (SECTION 12.1).
- Modification of the classification ADR/IMDG/ICAO/IATA/RID (SECTION 14).
- Addition of abbreviations and acronyms (SECTION 16).

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

| | |
|---|---|
| Physical hazards | On basis of test data |
| Health hazards | Calculation method |
| Environmental hazards | Calculation method |

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

Abbreviations and acronyms used:
ADR/RID: European Agreement concerning the International Carriage of Dangerous Goods by Road.
AwSV: Facility Regulations for handling substances that are hazardous for the water.
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.
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.
WGK: Water hazard classes.

Key literature references and sources for data:
http://eur-lex.europa.eu/homepage.html
http://echa.europa.eu/

*-Continued on next page.-*

Regulation (EU) 2020/878.
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) 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, Authorisation and Restriction of Chemical substances and mixtures (REACH).

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.

*-End of safety data sheet.-*