



**Safety Data Sheet**  
**TRICLOR 90 (PASTIGLIE DA 200 GRAMMI)**

**Safety Data Sheet dated 17/5/2019, version 5**

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

1.1. Product identifier

Identification of the substance:

Trade name: TRICLOR 90 (pastiglie da 200 grammi)  
CAS number: 87-90-1  
EC number: 201-782-8  
Index number: 613-031-00-5

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

Identified use:

Disinfectant tablets for swimming pool water. Minimum active chlorine available guarantee : 89-90%.  
Medico-surgical product - ministry of health rec. No. 18018.

Uses advised against:

Any other use different from the identified uses.

1.3. Details of the supplier of the safety data sheet

Company:  
BARCHEMICALS SRL  
VIA S.ALLENDE 14  
CASTELNUOVO RANGONE (MO)  
ITALY  
PHONE. +39 059/536502  
FAX. +39 059/536742  
www.barchemicals.it

Competent person responsible for the safety data sheet:

barani.corrado@barchemicals.it

1.4. Emergency telephone number







Barani Dr.Corrado - MOBILE PHONE. +39 335/6109383

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**SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture

EC regulation criteria n°1272/2008 (CLP)

-  Danger, Ox. Sol. 2, May intensify fire oxidiser..
-  Warning, Acute Tox. 4, Harmful if swallowed.
-  Warning, Eye Irrit. 2, Causes serious eye irritation.
-  Warning, STOT SE 3, May cause respiratory irritation.
-  Warning, Aquatic Acute 1, Very toxic to aquatic life.
-  Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.

EUH031 Contact with acids liberates toxic gas.

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Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H272 May intensify fire; oxidiser.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P102 Keep out of reach of children.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves and eye/face protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Special Provisions:

EUH031 Contact with acids liberates toxic gas.

EUH206 Warning! Do not use together with other products. May release dangerous gases (chlorine).

Contains

symclosene; trichloroisocyanuric acid; trichloro-1,3,5-triazinetriion

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

### SECTION 3: Composition/information on ingredients

3.1. Substances






Identification of the substance:

Chemical characterization: symclosene; trichloroisocyanuric acid; trichloro-1,3,5-triazinetriion


Trade code: TRICLORPMC

CAS number: 87-90-1

EC number: 201-782-8

Qty	Name	Ident. Number	Classification
100 %	symclosene; trichloroisocyanuric acid; trichloro-1,3,5- triazinetriion	Index 613-031-00-5 number: CAS: 87-90-1 EC: 201-782-8	 2.14/2 Ox. Sol. 2 H272  3.3/2 Eye Irrit. 2 H319  3.8/3 STOT SE 3 H335  4.1/A1 Aquatic Acute 1 H400  4.1/C1 Aquatic Chronic 1 H410

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			 3.1/4/Oral Acute Tox. 4 H302
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3.2. Mixtures  
N.A.

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**SECTION 4: First aid measures**

4.1. Description of first aid measures

In case of skin contact:

After contact with skin, wash immediately with soap and plenty of water.  
Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.  
Protect uninjured eye.

In case of Ingestion:

Rinse well your mouth  
Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.  
In case of breathing difficult, bring the injured person into the open air and store it in a comfortable position for breathing. Consult a physician.  
If breathing is irregular or stopped, administer artificial respiration.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

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**SECTION 5: Firefighting measures**

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Water spray, heavy alcohol foam, dry chemical or carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Alogenocarbon extinguisher.

5.2. Special hazards arising from the substance or mixture

Burning produces heavy smoke.

Do not inhale explosion and combustion gases.

If this product is involved in a fire you can release: carbon monoxide, carbon dioxide, nitrogen oxide, nitrous gases, hydrochloric acid.

5.3. Advice for firefighters

Immediately isolate the area by removing all persons from the area of the accident in the event of a fire. No action shall be taken involving any personal risk or without proper training. Firefighters must wear protective equipment and self-contained breathing apparatus (SCBA) with a full-face mask on the working face at positive pressure. Fire extinguishers (including helmets, protective boots and gloves) conforming to European Standard EN469 will provide basic protection for chemical accidents.

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**SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate the surrounding areas.

Prevent entry of foreign and unprotected personnel.

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Do not touch or walk on spilled material.  
Avoid breathing vapors or mists.  
Provide adequate ventilation.  
Wear personal protection equipment.  
Wear breathing apparatus if exposed to vapours/dusts/aerosols.  
See protective measures under point 7 and 8.

**6.2. Environmental precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.  
Retain contaminated washing water and dispose it.  
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

**6.3. Methods and material for containment and cleaning up**

Stop the escape if there is no risk. Move the containers from the spill area. Get closer to the source of overwhelming emission. Prevent spills in sewage systems, waterways, basements or restricted areas. Wash and convey the spilled amounts in a waste treatment plant. Collect with the shovel and place in suitable containers for disposal. Avoid dust formation. After cleaning each trace with water. Eliminate in compliance with the applicable standard. Dispose of contaminated material in suitable containers and start waste disposal. After collection, rinse the area and materials with water by retrieving the water used and, if necessary, dispose of it in authorized plants.

**6.4. Reference to other sections**

See also section 8 and 13

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**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.  
Use localized ventilation system.  
Don't use empty container before they have been cleaned.  
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.  
Contaminated clothing should be changed before entering eating areas.  
Do not eat or drink while working.  
See also section 8 for recommended protective equipment.

**7.2. Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a cool, dry place.  
Store at room temperature in a ventilated place, away from direct sunlight and away from heat sources.

Do not eat, drink or smoke at the workplace. Foods and beverages should be consumed only in areas specifically identified after removing contaminated clothing and protective equipment and after washing your hands. Wash in any case hands after handling the substance / mixture.

Keep away from food, drink and feed.

Incompatible materials:

Keep away from acids.

Keep away from combustible materials.

Instructions as regards storage premises:

Cool and adequately ventilated.

**7.3. Specific end use(s)**

See section 1.2.

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**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

symclosene; trichloroisocyanuric acid; trichloro-1,3,5-triazinetriol - CAS: 87-90-1  
ACGIH - TWA: 1.5 mg/m<sup>3</sup>

DNEL Exposure Limit Values

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N.A.  
PNEC Exposure Limit Values  
N.A.  
8.2. Exposure controls  
Eye/face protection:  
Eye glasses with side protection. EN166  
Protection for skin:  
Protective suit.  
Protection for hands:  
Gloves resistant to chemicals. EN 374  
Respiratory protection:  
Respiratory protection necessary for the formation of dust. Filter device (EN 147). Type: B-P2, combined gas filters, inorganic (chlorine) vapors and particles; Color code: gray / white.  
Thermal Hazards:  
Not applicable (the product is handled at room temperature)  
Environmental exposure controls:  
Do not allow the product to be absorbed from the soil or from entering waterways or sewers.  
Do not let product enter drains. Discharge into the environment must be avoided.  
The product is toxic to the aquatic environment.  
Appropriate engineering controls:  
Ensure adequate ventilation. Comply with the maximum concentration values in the workplace.  
Predict the presence of showers and eye wash fountains at the workplace.

**SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	White pastels	--	--
Odour:	Chlorine biting	--	--
Odour threshold:	N.A.	--	--
pH:	2,5 - 3,0	--	Solution 1% in water
Melting point / freezing point:	225 - 240 °C	--	--
Initial boiling point and boiling range:	N.A.	--	--
Flash point:	N.A.	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	Not inflammable	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	Not Available	--	--
Relative density:	Not Available	--	--
Solubility in water:	12 g/l	--	at 20 °C
Solubility in oil:	Not Available	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	> 200 °C	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--

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Oxidizing properties:	Comburente	--	--
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9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

**SECTION 10: Stability and reactivity**

10.1. Reactivity

oxidising substance: it enhances combustion of other substances

Oxidizing properties.

In contact with free acids toxic gas (chlorine).

10.2. Chemical stability

Stable under recommended storage and handling. Please refer to section 7 of the MSDS.

10.3. Possibility of hazardous reactions

Do not mix with chlorinated products. A toxic gas (chlorine) can develop.

Explosion hazard: alcohol, ethanol, organic substances, methanol.

Intense reaction with: ammonium compounds, halogenated hydrocarbons, phenol, reducing agents, nitroderivatives, strong oxidants and flammable substances.

10.4. Conditions to avoid

Do not mix with acids. It can be produced toxic gases (chlorine).

Avoid contact with organic material.

Keep away from naked flames, sparks and other sources of ignition.

10.5. Incompatible materials

Acids.

Organic materials that can generate combustion.

Products containing nitrogen (ammonia, urea etc.)

10.6. Hazardous decomposition products

Hydrochloric acid.

Carbon monoxide

Carbon dioxide.

**SECTION 11: Toxicological information**

11.1. Information on toxicological effects

Toxicological information of the substance:

symclosene; trichloroisocyanuric acid; trichloro-1,3,5-triazinetriol - CAS: 87-90-1

a) acute toxicity

The product is classified: Acute Tox. 4 H302

Test: LD50 - Route: Oral - Species: Rat = 406 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 20 g/kg

Test: LC50 - Route: Inhalation - Species: Rat > 50 mg/l - Duration: 1h

b) skin corrosion/irritation

Not classified

Based on available data, the classification criteria are not met

c) serious eye damage/irritation

The product is classified: Eye Irrit. 2 H319

d) respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity



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- Not classified  
Based on available data, the classification criteria are not met
- f) carcinogenicity  
Not classified  
Based on available data, the classification criteria are not met
- g) reproductive toxicity  
Not classified  
Based on available data, the classification criteria are not met
- h) STOT-single exposure  
The product is classified: STOT SE 3 H335
- i) STOT-repeated exposure  
Not classified  
Based on available data, the classification criteria are not met
- j) aspiration hazard  
Not classified  
Based on available data, the classification criteria are not met
- symclosene; trichloroisocyanuric acid; trichloro-1,3,5-triazinetriion - CAS: 87-90-1  
LD50 (RAT) ORAL: 406 MG/KG  
LD50 (RABBIT) SKIN: 20000 MG/KG
- symclosene; trichloroisocyanuric acid; trichloro-1,3,5-triazinetriion - CAS: 87-90-1  
LD50 (RAT) ORAL: 406 MG/KG  
LD50 (RABBIT) SKIN: 20000 MG/KG

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**SECTION 12: Ecological information**

- 12.1. Toxicity  
No information is available on the mixture as a whole. This is the information on ecotoxicological effects of the individual components.  
Il prodotto è nocivo per la vita acquatica in quanto libera cloro  
symclosene; trichloroisocyanuric acid; trichloro-1,3,5-triazinetriion - CAS: 87-90-1  
The product is classified: Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410
- a) Aquatic acute toxicity:  
Endpoint: LC50 - Species: Daphnia = 0.2 ppm - Duration h: 48  
symclosene; trichloroisocyanuric acid; trichloro-1,3,5-triazinetriion - CAS: 87-90-1
- a) Aquatic acute toxicity:  
Endpoint: LC50 - Species: Fish = 0.08 mg/l - Duration h: 96  
Endpoint: EC50 - Species: Daphnia = 0.17 mg/l - Duration h: 48
- 12.2. Persistence and degradability  
N.A.
- 12.3. Bioaccumulative potential  
N.A.
- 12.4. Mobility in soil  
N.A.
- 12.5. Results of PBT and vPvB assessment  
vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects  
None

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**SECTION 13: Disposal considerations**

- 13.1. Waste treatment methods  
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

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**SECTION 14: Transport information**

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- 14.1. UN number  
ADR-UN Number: 2468  
IATA-UN Number: 2468  
IMDG-UN Number: 2468
- 14.2. UN proper shipping name  
ADR-Shipping Name: TRICHLOROISOCYANURIC ACID, DRY  
IATA-Shipping Name: TRICHLOROISOCYANURIC ACID, DRY  
IMDG-Shipping Name: TRICHLOROISOCYANURIC ACID, DRY
- 14.3. Transport hazard class(es)  
ADR-Class: 5.1  
ADR - Hazard identification number: 50  
IATA-Class: 5.1  
IATA-Label: 5.1  
IMDG-Class: 5.1
- 14.4. Packing group  
ADR-Packing Group: II  
IATA-Packing group: II  
IMDG-Packing group: II
- 14.5. Environmental hazards  
ADR-Environmental Pollutant: Yes  
IMDG-Marine pollutant: Marine Pollutant
- 14.6. Special precautions for user  
ADR-Subsidiary risks: -  
ADR-S.P.: -  
ADR-Transport category (Tunnel restriction code): 2 (E)  
IATA-Passenger Aircraft: 558  
IATA-Subsidiary risks: -  
IATA-Cargo Aircraft: 562  
IATA-S.P.: -  
IATA-ERG: 5L  
IMDG-EmS: F-A , S-Q  
IMDG-Subsidiary risks: -  
IMDG-Stowage and handling: Category A H1  
IMDG-Segregation: -
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code  
N.A.

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## SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Dir. 98/24/EC (Risks related to chemical agents at work)  
Dir. 2000/39/EC (Occupational exposure limit values)  
Regulation (EC) n. 1907/2006 (REACH)  
Regulation (EC) n. 1272/2008 (CLP)  
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013  
Regulation (EU) 2015/830  
Regulation (EU) n. 286/2011 (ATP 2 CLP)  
Regulation (EU) n. 618/2012 (ATP 3 CLP)  
Regulation (EU) n. 487/2013 (ATP 4 CLP)  
Regulation (EU) n. 944/2013 (ATP 5 CLP)



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Regulation (EU) n. 605/2014 (ATP 6 CLP)  
Regulation (EU) n. 2015/1221 (ATP 7 CLP)  
Regulation (EU) n. 2016/918 (ATP 8 CLP)  
Regulation (EU) n. 2016/1179 (ATP 9 CLP)  
Regulation (EU) n. 2017/776 (ATP 10 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

No restriction.

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: P8, E1

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the substance.

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**SECTION 16: Other information**

**For professional use.**

Full text of phrases referred to in Section 3:

H272 May intensify fire; oxidiser.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H302 Harmful if swallowed.

Hazard class and hazard category	Code	Description
Ox. Sol. 2	2.14/2	Oxidising solid, Category 2
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,  
Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van  
Nostrand Reinold

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Liability exclusion clause: The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

For professional use.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.