



Safety Data Sheet  
TRICLOR 90 (pastiglie da 200 g)

Safety Data Sheet dated 4/9/2017, version 3

**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 g)  
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

**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.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

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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 or mist.

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.

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: 21010436

CAS number: 87-90-1

EC number: 201-782-8

Qty	Name	Ident. Number	Classification
>= 90%	symclosene; trichloroisocyanuric acid; trichloro-1,3,5- triazinetriion	Index number: CAS: EC:	613-031-00-5 87-90-1 201-782-8
			 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  3.1/4/Oral Acute Tox. 4 H302

3.2. Mixtures

N.A.

### SECTION 4: First aid measures

4.1. Description of first aid measures

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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

## **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.

## **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.

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.

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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

## 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.

## 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

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:

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- 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.	--	--
Oxidizing properties:	Oxidising	--	--

9.2. Other information

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

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**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-triazinetriion - CAS: 87-90-1  
a) acute toxicity:  
Test: LD50 - Route: Oral - Species: Rat = 406 mg/kg  
Test: LD50 - Route: Skin - Species: Rabbit = 20 g/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  
symclosene; trichloroisocyanuric acid; trichloro-1,3,5-triazinetriion - CAS: 87-90-1  
LD50 (RAT) ORAL: 406 MG/KG  
LD50 (RABBIT) SKIN: 20000 MG/KG

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

**SECTION 12: Ecological information**

- 12.1. Toxicity

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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-triazinetrión - CAS: 87-90-1

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Daphnia = 0.2 ppm - Duration h: 48

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

**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.

**SECTION 14: Transport information**



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: -

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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.

### 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)  
Regulation (EU) n. 605/2014 (ATP 6 CLP)  
Regulation (EU) n. 2015/1221 (ATP 7 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: E1

15.2. Chemical safety assessment

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

### 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.



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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

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking  
SECTION 2: Hazards identification  
SECTION 3: Composition/information on ingredients  
SECTION 4: First aid measures  
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SECTION 6: Accidental release measures  
SECTION 7: Handling and storage  
SECTION 8: Exposure controls/personal protection  
SECTION 9: Physical and chemical properties  
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SECTION 12: Ecological information  
SECTION 14: Transport information  
SECTION 15: Regulatory information  
SECTION 16: Other information

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

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.  
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.

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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.