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

1.1. Product identifier

Name of product	SpaTime Chlorine Granules / Granulato di Cloro 426
Name of substance	troclosene sodium, dihydrate
Index No	613-030-01-7
EC No	220-767-7
REACH registration number	01-2119489371-33-xxxx
CAS No	51580-86-0

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

Recommended intended purpose(s)
Product for disinfection and oxidation of pool water

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor	BAYROL Deutschland GmbH Robert-Koch-Str. 4, D-82152 Planegg Phone +49 (0) 89 85701-0, Fax +49 (0) 89 85701-276 E-Mail bayrol@bayrol.de Internet www.bayrol.de
Advice	E-mail (competent person): ASchwarzenboeck@bayrol.de

1.4. Emergency telephone number

Emergency advice	Giftnotruf München (oder jedes andere Giftinformationszentrum) Phone +49 (0) 89 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to 67/548/EEC or 1999/45/EC

Xn; R22
R31
Xi; R36/37
N; R50/53

R-phrases

22	Harmful if swallowed.
31	Contact with acids liberates toxic gas.
36/37	Irritating to eyes and respiratory system.
50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
Acute Tox. 4	**H302**	
Eye Irrit. 2	**H319**	
STOT SE 3	**H335**	

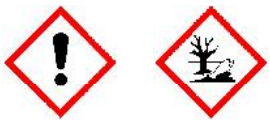
Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
Aquatic Chronic 1	**H410**	

Hazard Statements

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.

2.2. Label elements
Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]



GHS07 GHS09

Signal word
Warning

Hazard Statements

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.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minuts. Remove contact lenses, if present and easy to do. Continue rinsing.
P309 + P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

Hazardous ingredients for labeling
troclosene sodium, dihydrate

Supplemental Hazard information (EU)
Contact with acids liberates toxic gas.

Special rules for supplemental label elements for certain mixtures
Warning! Do not use together with other products. May release dangerous gases (chlorine).

2.3. Other hazards
Results of PBT and vPvB assessment
This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

SECTION 3: Composition/ information on ingredients

3.1. Substances

CAS No 51580-86-0 **troclosene sodium, dihydrate**
EC No 220-767-7
Index No 613-030-01-7
REACH registration number 01-2119489371-33-xxxx

3.2. Mixtures
not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures
General information
Remove contaminated soaked clothing immediately and dispose it safely.
Symptoms of poisoning may not occur for hours, therefore medical supervision for at least 48 hours necessary.
Adhere to personal protective measures when giving first aid.

In case of inhalation
Remove the casualty into fresh air and keep him immobile.
Refer for medical treatment.

In case of skin contact
In case of contact with skin wash off immediately with plenty of water.
Consult a doctor if skin irritation persists.

In case of eye contact
Eye rinsing with water carefully while protecting unhurt eye.
Call for a doctor immediately.

In case of ingestion
Do not induce vomiting.
Call for a doctor immediately.
Rinse out mouth and give plenty of water to drink.

4.2. Most important symptoms and effects, both acute and delayed
No information available.

4.3. Indication of any immediate medical attention and special treatment needed
Treatment (Advice to doctor)
Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
Large quantities of water
Carbon dioxide
sand

Unsuitable extinguishing media
Small quantities of water

5.2. Special hazards arising from the substance or mixture
In case of fire formation of dangerous gases possible.
In the event of fire the following can be released:
Nitrogen oxides (NOx)
Carbon monoxide (CO)
Carbon dioxide (CO2)

Hydrogen chloride (HCl)
Chlorine (Cl2)

5.3. Advice for firefighters
Special protective equipment for fire-fighters
Use breathing apparatus with independent air supply.
Wear full protective clothing.

Additional information
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
No information available.

For non-emergency personnel
Ensure adequate ventilation.
Avoid dust formation.
Use personal protective clothing.
Use breathing apparatus if exposed to vapours/dust/aerosol.

6.2. Environmental precautions
Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up
Take up mechanically and send for disposal.

Additional Information
Neutralize active chlorine with suitable materials (Sulphite, Thiosulphate or hydrogen peroxide aqueous solution)

6.4. Reference to other sections
Safe handling: see section 7
Disposal: see section 13
Personal protection equipment: see section 8
Emergency telephone number: see section 1

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Use only in well-ventilated areas.

General protective measures
Avoid contact with eyes and skin
Do not inhale dust.

Hygiene measures
At work do not eat, drink and smoke.
Keep away from food and drink.
Wash hands before breaks and after work.

Advice on protection against fire and explosion
Keep away from sources of ignition - No smoking
Keep at distance of acids, reducing agents and organic substances (e.g.wood, paper, fat).
Avoid entering of water in shortage.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep only in original container.

Advice on storage compatibility
Do not store together with food.

Further information on storage conditions
Keep container tightly closed.
Storage: cool and dry

Information on storage stability
Storage time: 5 years.

7.3. Specific end use(s)
Recommendation(s) for intended use
See section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls
Respiratory protection
In case of dust formation wear micro dust mask.

Hand protection
chemical-resistant gloves
Suitable materials (recommended: protection index 6, >480 minutes permeation time according to EN 374)
Nitrile-butadiene rubber (NBR) - 0.4 mm layer thickness
Butyl rubber (butyl) - 0.7mm layer thickness
In view of the many different types, the manufacturers' directions for use must be followed

Eye protection
tightly fitting goggles

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	**Colour**	**Odour**
granules	white	typical, pungent

Odour threshold
No information available.

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	ca. 6,7	20 ℃	10 g/l		
Boiling temperature / boiling range	No information available.				
melting point	240 - 250 ℃				
Flash point	No information available.				

	Value	Temperature	at	Method	Remark
Vapourisation rate	No information available.				
Flammable (solid)	No information available.				
Flammability (gas)	No information available.				
Ignition temperature	No information available.				
Self ignition temperature	No information available.				
Lower explosion limit	No information available.				
Upper explosion limit	No information available.				
Vapour pressure	No information available.				
Relative density	No information available.				
Bulk density	ca. 1000 kg/m3				
Vapour density	No information available.				
Solubility in water	250 g/l	25 ℃			
Solubility/other	No information available.				
Partition coefficient n-octanol/water (log P O/W)	No information available.				
Decomposition temperature	No information available.				
Viscosity	No information available.				
Water content	ca. 8 %				
Solids content	> 99 %				

Oxidising properties
No information available.

Explosive properties
No information available.

9.2. Other information
No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity
Thermal decomposition can lead to the escape of irritating gases and vapours.

10.2. Chemical stability
Decomposition temperature:
240℃ - 250℃

10.3. Possibility of hazardous reactions
Contact with acids liberates toxic gases.

10.4. Conditions to avoid
Reactions with combustible substances.
Reactions with acids.
Reactions with fats and oils.
Reactions with impurities.
Reactions with organic substances.

10.5. Incompatible materials
Materials to avoid
Oil
Acid

10.6. Hazardous decomposition products
Nitrous gases
Carbon monoxide
Hydrogen chloride (HCl)
Chlorine

Thermal decomposition

Remark >240 ℃

Additional information
Product may cause bleaching textiles, liners, paintings etc. Chlorine gas may decompose metals and is corrosive.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral	ca. 1400 mg/kg	rat		
Irritability skin	low irritant effect - not necessary to label			
Irritability eye	irritant			

Experiences made from practice
Irritates respiratory tract.
Irritates mucous membranes.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 < 1 mg/l (96 h)	Lepomis macrochirus		
Daphnia	EC50 < 1 mg/l (48 h)	Daphnia magna		

12.2. Persistence and degradability
No information available.

12.3. Bioaccumulative potential
No information available.

12.4. Mobility in soil
No information available.

12.5. Results of PBT and vPvB assessment
This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6. Other adverse effects
General regulation
Product is not allowed to be discharged into aquatic environment, drains or sewage treatment plants.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Recommendations for the product
Remove in accordance with local official regulations.
There are no harmonised regulations on the disposal of chemicals in the member states of the EU. In Germany the Recycling and Waste Management Act (KrWG) stipulates recycling as a requirement.

Recommendations for packaging
Uncontaminated packaging may be taken for recycling.

Recommended cleansing agent
Water

SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	3077	3077	3077
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N. O.S. (troclosene sodium, dihydrate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (troclosene sodium, dihydrate)	Environmentally hazardous substance, solid, n.o.s. (troclosene sodium, dihydrate)
14.3. Transport hazard class(es)	9	9	9

	ADR/RID	IMDG	IATA-DGR
14.4. Packing group	III	III	III
14.5. Environmental hazards	Yes	Yes	Yes

14.6. Special precautions for user
No information available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information available.

Land and inland navigation transport ADR/RID
Hazard label(s) 9
tunnel restriction code E
Classification code M7

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Other regulations (EU)
Please note:
Observe regulation 98/24/EC for employee health protection against the threat of chemical substances in the workplace.
Biocide directive (98/8/EC).

15.2. Chemical Safety Assessment
For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Recommended uses and restrictions
National and local regulations concerning chemicals shall be observed.
Biozide sicher verwenden. Vor Gebrauch stets Kennzeichnung und Produktinformation lesen.

Further information
Refer to product information paper.
The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 5.1
Sources of key data used
Results of own researches and examinations
Literature informations
Toxicity studies, NIOSH-Tox-Data
National legislation and regulation