

Printing date 25.03.2025 Version number 8 (replaces version 7) Revision: 25.03.2025

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

- · 1.1 Product identifier
- · Trade name: Chlorine Granules
- · CAS Number:

51580-86-0

· Index number:

613-030-01-7

- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Product category

PC8 Biocidal products

PC19 Intermediate

PC37 Water treatment chemicals

· Application of the substance / the mixture

The product has many industrial, professional and consumer applications.

· Uses advised against

Any use involving aerosol formation or vapour release in excess of the assigned Workplace Exposure Limit where workers are exposed without suitable Respiratory Protective Equipment.

Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).

Processes involving extreme heat use advised against.

Processes involving the use of incompatible substances - refer to section 10.

- · 1.3 Details of the supplier of the safety data sheet
- · Supplier:

Complete Pool Controls Ltd

Unit 2, The Park

Stoke Orchard

Bishops Cleeve

Gloucestershire

GL52 7RS

UK

Tel: +44 (0)1242 662700 (office hours) email: sales@cpc-chemicals.co.uk

- · Further information obtainable from: Product safety department.
- · 1.4 Emergency telephone number:

Members of the public seeking specific information on poisons should contact:

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

\cdot 2.1 Classification of the substance or mixture

· Classification according to GB-CLP

Acute Tox. 4 H302 Harmful if swallowed.

Eye Irrit. 2 H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation.

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

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- · 2.2 Label elements
- · Labelling according to GB-CLP The substance is classified and labelled according to the GB CLP regulation.
- · Hazard pictograms





GHS07 GHS

- · 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

P261 Avoid breathing dust.

P280 Wear eye protection / face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local regulations.

· Additional information:

EUH031 Contact with acids liberates toxic gas.

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

· The Detergents (Amendment) (EU Exit) Regulations 2020 / Labelling for contents

disinfectants, preservation agents (Troclosene sodium, dihydrate)

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.1 Substances
- · CAS No. Description

CAS: 51580-86-0 Troclosene sodium, dihydrate

Alternative CAS number: 2893-78-9

- · Identification number(s)
- · Index number: 613-030-01-7
- · Additional information: CAS 2893-78-9: anhydrous form

- GB



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SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information:

Immediately remove any clothing soiled by the product.

Rinse contaminated clothes (fire hazard) with plenty of water.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation: Supply fresh air; consult doctor in case of complaints.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact:

Check for and remove any contact lenses.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

- · Information for doctor: Treat symptomatically and supportively.
- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· Suitable extinguishing agents:

Water spray

Alcohol resistant foam

Carbon dioxide

Use fire extinguishing methods suitable to surrounding conditions.

· For safety reasons unsuitable extinguishing agents:

ABC powder

Water with full jet

· 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Nitrogen oxides (NOx)

Hydrogen chloride (HCl)

Product is not classified as oxidizing. However, it enhances combustion of other substances.

· 5.3 Advice for firefighters

· Protective equipment:

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

Wear fully protective suit.

· Additional information

Cool endangered receptacles with water spray.

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Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Avoid formation of dust.

Use respiratory protective device against the effects of fumes/dust/aerosol.

• 6.2 Environmental precautions:

Do not allow to penetrate the ground/soil.

Do not allow product to reach sewage system or any water course in the undiluted form.

Inform respective authorities in case of seepage into water course or sewage system.

· 6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

Do not use combustible materials such as paper towels to clean up spills.

Keep away from water.

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Avoid contact with clothing and other combustible materials.

Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.

Do not mix with acids.

Safety showers and eye wash facilities should be available at the work area.

Any unavoidable deposit of dust must be regularly removed.

Keep away from heat and direct sunlight.

When diluting always pour product into water and not vice versa.

Ensure good ventilation/exhaustion at the workplace.

Rinse contaminated clothing with plenty of water (Fire hazard)

· Information about fire - and explosion protection:

Keep respiratory protective device available.

Can decompose explosively when heated.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

· Requirements to be met by storerooms and receptacles:

Prevent any seepage into the ground.

Store only in the original receptacle.

· Information about storage in one common storage facility:

Do not store together with acids.

Do not store together with alkalis (caustic solutions).

Store away from flammable substances.

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Store away from reducing agents.

Store away from foodstuffs.

Store away from oxidising agents.

- · Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
- · Storage class: 13
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingre	· Ingredients with limit values that require monitoring at the workplace:		
CAS:	CAS: 51580-86-0 Troclosene sodium, dihydrate		
WEL	Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³ Sen; as -NCO		
DNFL c			

	· DNELs		
Γ	Oral	Long-term systemic effects	1.15 mg/kg bw/day (general population)
	Dermal	Long-term systemic effects	1.15 mg/kg bw/day (general population)
			2.3 mg/kg bw/day (worker)
	Inhalative	Long-term systemic effects	1.99 mg/m³ (general population)
			8.11 mg/m³ (worker)
_			

· PNECs		
Freshwater	170 ng/L	
Freshwater - Intermittent releases	1.7 μg/L	
Marine water	1.52 mg/L	
Sewage Treatment Plant	590 μg/L	
Sediment (freshwater)	7.56 mg/kg	
	756 μg/kg	

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

Take note of assigned Workplace Exposure Limits.

Do not breathe dust

A safe system of work must be formulated and followed to ensure safe working with this product. Relevant workers must receive suitable and sufficient training and supervision.

Do not eat, drink, smoke or sniff while working.

Depending on the degree of exposure, periodic medical examination is suggested.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Ensure that eyewash stations and safety showers are close to the workstation location.

Contaminated clothes are a fire hazard. Rinse with plenty of water.

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· Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

· Hand protection



Protective gloves.

Use gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Butyl rubber, BR

Chloroprene rubber, CR

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Not suitable are gloves made of the following materials:

Leather gloves

Textile gloves.

· Eye/face protection



Safety glasses with side-shields conforming to EN166.

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

· Body protection:



Protective work clothing

Body protection must be chosen depending on product properties, activity and possible exposure.

- · Environmental exposure controls Do not allow to enter drains, sewers or watercourses.
- · Risk management measures The operators shall be instructed adequately.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

Physical state
Colour:
Odour:
Uke chlorine
Odour threshold:
Not determined.

• Melting point/freezing point: 250 °C

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· Boiling point or initial boiling point and boiling rang	e Undetermined.
· Flammability	Product is not flammable.
Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	Not applicable.
· Auto-ignition temperature:	250 °C −
· Decomposition temperature:	Not determined.
• pH (10 g/l) at 20 °C	6-7
· Viscosity:	
· Kinematic viscosity	Not applicable.
Dynamic:	Not applicable.
· Solubility	
· water at 25 °C:	250 g/l
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not applicable.
· Density and/or relative density	
· Density at 20 °C:	0.97 g/cm ³
· Relative density	Not determined.
· Bulk density:	$1,000 \text{ kg/m}^3$
· Vapour density	Not applicable.
· Particle characteristics	Particle size: 0.25 - 1 mm
· 9.2 Other information	NOTE: The physical data presented above are typical values and should not be construed as a specification. *Hydrolyses rapidly upon addition to water.
· Appearance:	,,,,,
· Form:	Granulate
· Important information on protection of health an	d
environment, and on safety.	
Ignition temperature:	Not determined.
· Explosive properties:	Product does not present an explosion hazard.
· Change in condition	
· Evaporation rate	Not applicable.
· Information with regard to physical hazard classes	
· Explosives	Not applicable
· Flammable gases	Not applicable
· Aerosols	Not applicable
· Oxidising gases	Not applicable
· Gases under pressure	Not applicable
· Flammable liquids	Not applicable
· Flammable solids	Not applicable
· Self-reactive substances and mixtures	Not applicable
· Pyrophoric liquids	Not applicable
· Pyrophoric solids	Not applicable
· Self-heating substances and mixtures	Not applicable
· Substances and mixtures, which emit flammable gase	
in contact with water	Not applicable
· Oxidising liquids	Not applicable
· Oxidising solids	Not applicable
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· Organic peroxides	Not applicable
· Corrosive to metals	Not applicable
· Desensitised explosives	Not applicable

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: Decomposes on heating, producing toxic fumes.
- · 10.3 Possibility of hazardous reactions

Reacts violently with many substances.

Acts as an oxidising agent on organic materials such as wood, paper and fats.

Risk of explosion in contact with:

Strong reducing agents

Strong bases

Reacts with acids releasing chlorine.

- 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials:

Strong acids and oxidising agents

Substances specifically listed in section 10.3 as incompatible.

Ammonia

Strong bases.

Combustible materials.

Flammable materials

Reducing agents

· 10.6 Hazardous decomposition products:

Hydrogen cyanide (prussic acid)

Chlorine

Hydrogen chloride (HCl)

Chlorine compounds

Nitrogen oxides (NOx)

Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Harmful if swallowed.

· LD/LC	· LD/LC50 values relevant for classification:		
Oral	LD50	1,500 mg/kg (rat)	
Dermal	LD50	> 5,000 mg/kg (rabbit)	

- Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Causes serious eye irritation.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.

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· STOT-single exposure

May cause respiratory irritation.

- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · Subacute to chronic toxicity: Prolonged or repeated skin contact may irritate and cause dermatitis.
- · Additional toxicological information:

INHALATION RISK: A harmful concentration of airborne particles can be reached quickly especially if powdered.

- · 11.2 Information on other hazards
- · Endocrine disrupting properties Substance is not listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential Product is not expected to bioaccumulate.
- 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.
- · 12.7 Other adverse effects
- · Remark: Very toxic for fish
- $\cdot \ Additional \ ecological \ information:$
- · General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Recommended Hierarchy of Controls:

- Minimise waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

Do not mix with other waste streams.

- · Uncleaned packaging:
- · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. Container remains hazardous when empty. Continue to observe all precautions.

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Do not mix with other waste streams.

This product is a registered pesticide.

Dispose in accordance with all applicable regulations.

Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor.

DO NOT transport wet or damp material. Damp material should be neutralized to a safe state.

Disposal must be made according to official regulations.

Containers, even those that are "empty," may contain residues that can develop flammable and/or hazardous vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

• **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information	
· 14.1 UN number or ID number · ADR/RID/ADN, IMDG, IATA	UN3077
14.2 UN proper shipping nameADR/RID/ADN	UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Troclosene sodium,
· IMDG	dihydrate) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Troclosene sodium, dihydrate), MARINE POLLUTANT
· IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Troclosene sodium, dihydrate)
· 14.3 Transport hazard class(es)	
· ADR/RID/ADN	
· Class · Label	9 (M7) Miscellaneous dangerous substances and articles.
· IMDG, IATA	
· Class · Label	9 Miscellaneous dangerous substances and articles.9
· 14.4 Packing group · ADR/RID/ADN, IMDG, IATA	Ш
14.5 Environmental hazards:Marine pollutant:Special marking (ADR/RID/ADN):	Symbol (fish and tree) Symbol (fish and tree)
· Special marking (IATA):	Symbol (fish and tree)

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· 14.6 Special precautions for user · Hazard identification number (Kemler code):	Warning: Miscellaneous dangerous substances and articles. 90
 Hazchem Code: Stowage Category Stowage Code	2Z A SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
· 14.7 Maritime transport in bulk according to IM	
instruments	Not applicable.
· Transport/Additional information:	Amounts up to 5kg or 5L per single or inner package are not regulated according to ADR/RID SP 375, IMDG 2.10.2.7 and IATA SP A197. DO NOT transport wet or damp product.
· ADR/RID/ADN	
· Limited quantities (LQ) · Excepted quantities (EQ)	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· Transport category	3
· Tunnel restriction code	(-)
· IMDG	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN ''Model Regulation'':	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TROCLOSENE SODIUM, DIHYDRATE), 9, III

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Poisons Act
- · Regulated explosives precursors Substance is not listed.
- · Regulated poisons Substance is not listed.
- · Reportable explosives precursors Substance is not listed.
- · Reportable poisons Substance is not listed.
- · Control Of Major Accident Hazards Regulations 2015 (COMAH)
- · Named dangerous substances ANNEX I Substance is not listed.
- · COMAH category E1
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· Training hints

This product should only be handled by workers who have received sufficient training in the safe handling and use of chemical products.

· Department issuing SDS: Product safety department.

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity - Category 4

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

* Data compared to the previous version altered.

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