Safety Data Sheet

Trichloroisocyanuric Acid

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1 IDENTIFICATION OF CHEMICAL

Product Name: Trichlor Chlorine Granules
Chemical Name: Trichloroisocyanuric acid (TCCA)
Other Names: Trichlor Granules

2 COMPOSITION

Ingredients:	Wt%	CAS No.	EINECS No	EEC No.	Phrases
Trichloroisocyanuric Acid	>96	87-90-1	613-031-00-5	201-782-8	R8,22,31,36/37,50/53 S1/2,8,26,41,60/61

3 HAZARD IDENTIFICATION

Oxidising agent: May ignite combustible material. Decomposes to release toxic chlorine, Hypochlorous Acid and Cyanuric Acid on contact with water.
Harmful: Harmful if inhaled or swallowed. Irritating to eye, skin and respiratory system.
Danger: Mixing with Sodium or Calcium Hypochlorite will cause explosive generation of Nitrogen Trichloride.
Environmental: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4 FIRST AID MEASURES

Skin Contact: Wash with plenty of cold water for a minimum of 15 minutes. If skin irritation persists, seek medical attention.

Eye contact: Flush eyes with cold flowing water for at least 20 minutes. Seek medical attention immediately.

Ingestion: Wash mouth out with water. **DO NOT INDUCE VOMITING. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.** Seek medical attention

Inhalation: Remove person to fresh air, rest and keep warm. In severe cases seek medical attention.

Note: When seeking medical attention, always show the product label.

5 FIRE FIGHTING MEASURES

Flammability: Non flammable but thermally decomposes at above 225 ^{o}C

Extinguishing media: Water (plenty) or CO_2. **DO NOT USE AMMONIUM COMPOUNDS AS NITROGEN TRIOXIDE WILL BE FORMED. (EXPLOSIVE AND TOXIC)**

Decomposition products: Decomposition liberates chlorine, Hypochlorous acid, Cyanuric acid. Nitrogen trichloride can be generated slowly by the reaction of small quantities of water with a high concentration of this product. Nitrogen trichloride can present an explosion hazard.

Fire fighting procedures: Firefighters should wear full protective clothing and self-contained breathing apparatus (SCBA). Thoroughly decontaminate fire fighting equipment including all fire fighting wearing apparel after the incident.

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6 ACCIDENTAL RELEASE MEASURES

Use appropriate personal protective equipment as detailed in section 8.

Spillages and Leaks:

Contain the spillage. Deposit into clean drum or plastic bags including contaminated soil. Dispose in accordance with local and national legislation.

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7 HANDLING AND STORAGE

Handling: Strong oxidising agent. **DO NOT MIX WITH OTHER CHEMICALS.** Mix only with water. Never add water to product. Always add product to water. Use clean dry dispensing equipment.

Storage: Keep this product in original, sealed container when not in use. Store in a cool, dry, well-ventilated area. Keep this product and all other chemicals out of reach of children.

Avoid contact with: Other swimming pool/spa chemicals in their concentrated forms.

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8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:	**8hr TWA**		**15min STEL**		**Authority**
	ppm	mg/m^3	ppm	mg/m^3	
Chlorine gas	0.5	1.5	0.3	2.9	EH40

General: General room ventilation plus local exhaust should be used to maintain exposure below TLV. Eye wash and emergency shower facilities recommended. Remove and wash contaminated clothing before reuse.

PPE **Respiratory:** Use respiratory protection for chlorine and dust inhalation protection.

Skin: Wear rubber gloves when handling this product. Avoid contact with skin.

Eyes: Wear splash goggles when handling this product

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9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Odour:	Chlorine
Appearance:	White Crystalline (Granules)
Colour:	White
pH:	2.7 – 3.3 (1% solution @ 25 ^{o}C)
Melting point:	225 ^{o}C
Relative density:	0.95 gm/cm^{3}
Solubility in water:	10gm/l @ 25 ^{o}C

10 STABILITY AND REACTIVITY

Conditions to avoid:	High temperature. Poor ventilation. Contamination. Moisture/high humidity.
Stability:	This product is stable under normal conditions. Decomposes at 225 ^{o}C approx.
Decomposition product:	Chlorine containing gases can be produced. Gradually forms Nitrogen Trichloride in damp, moist conditions. (Explosive gas)
Incompatible materials:	Avoid contact with water on concentrated material in the container. Avoid contact with easily oxidisable material such as organic compounds, reducing agents, Nitrogen containing compounds, Sodium or Calcium hypochlorite, other oxidisers, acids and alkalis.

11 TOXILOGICAL INFORMATION

Oral LD50 1000 mg/kg (rat)
This product is an eye and skin irritant.
This product is not listed as a carcinogen

12 ECOLOGICAL INFORMATION

This product is toxic to toxic to fish and aquatic organisms. **DO NOT** discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans or their waters unless in accordance with the applicable regulatory requirements. **DO NOT** discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority.

13 DISPOSAL CONSIDERATIONS

Disposal Method:	**DO NOT** put product, spilled product or filled or partially filled containers into the waste or waste compactor. Contact with incompatible materials could cause a reaction or fire. Disposal of unused, uncontaminated product is regulated according to local and national disposal legislation.
Empty Containers:	**DO NOT** re-use container. Rinse thoroughly before discarding.

14 TRANSPORT INFORMATION

UN No:	2468
Primary Hazard:	Oxidising substance
Packing Group:	II
Hazard ID No:	50
Class:	5.1
EAC:	2WE

15 REGULATORY INFORMATION

Product name: Trichlor Chlorine Granules
Hazard symbol: Oxidising/Harmful/Dangerous for the environment

Risk Phrases:	R8	Contact with combustible material may cause fire.
	R22	Harmful if swallowed
	R31	Contact with acids liberates toxic gas.
	R36/37	Irritating to eyes and respiratory system.
	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety Phrases:	S1/2	Keep locked up and out of reach of children
	S8	Keep container dry
	S26	In case of contact with eyes, rinse immediately with water and seek medical attention.
	S41	In case of fire and/or explosion **DO NOT** breathe fumes.
	S60	This material and/or its container must be disposed of as hazardous waste.
	S61	Avoid release to the environment. Refer to special instructions/Safety Date Sheet.

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16 OTHER INFORMATION

Recommended uses and restrictions. No further information

Further information sources. HSE Guidance note CS17

Sources of key data used to compile Safety Data Sheet.

Approved supply list. Approved carriage list, EH40, ACIGH tables.

The data in this Safety Data Sheet has been supplied as required by the Chemicals (Hazard Identification and Packaging) Regulations 1997, as amended, for the purpose of protecting the health and safety of industrial users who are deemed capable of understanding and acting on the information provided. Please ensure that it is passed to the appropriate person(s) in your company, who are capable of acting on the information.

This data sheet does not constitute a users assessment of the workplace risk as required by the Health and Safety at Work Act, COSHH, Management of Health and Safety at Work or other health and safety legislation.
