



Material Safety Data Sheet

Issue Date: July 21, 2011

Product Name: **HY-CLOR HY-TECH CHLORINE CONCENTRATE GRANULAR**

Hazardous Substance, NON-Dangerous Goods

COMPANY DETAILS

Company Name HY-CLOR AUSTRALIA PTY LIMITED
Address 5.01, 15 Orion Road
Tel/Fax Ph: (02) 9498 2925 Fax: (02) 9498 4329

IDENTIFICATION

Product Code HYCHTCG5
Product Name TRICHLOROISOCYANURIC ACID
Shipping Name (CSN) TRICHLOROISOCYANURIC ACID, DRY-OXIDIZER
Other Names TRICHLORS - TRIAZINETROINE
Sold As HY-CLOR HY-TECH CHLORINE CONCENTRATE
GRANULAR

This material is hazardous according to health criteria on NOHSC Australia

Hazard Category

Xn Harmful
Xi Irritant

Risk Phrase(s)

R22 Harmful if swallowed
R31 Contact with acids liberated toxic gas
R36/37 Irritating to eyes and respiratory system.

Safety Phrase(s)

S22 Do not breathe dust
S24/25 Avoid contact with skin and eyes
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection
S38 In case of insufficient ventilation, wear suitable respiratory equipment
S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label

NOT CLASSIFIED AS DANGEROUS GOODS BY THE CRITERIA OF THE AUSTRALIAN DANGEROUS GOODS CODE (ADG CODE) FOR TRANSPORT BY ROAD AND RAIL.

Poisons Schedule (Aust): S6

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

COMPOSITION INFORMATION

Chemical Entity	CAS NO	PROPORTION
Trichloroisocyanuric acid	87-90-1	>60%
Disodium tetraborate pentahydrate	12045-88-4	10%-30%

FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 746 766.)

Inhalation: Remove victim from exposure – avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. See medical advice if effects persist.

Skin Contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye Contact: If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor; or for at least 15 minutes and transport to a doctor or hospital.

Ingestion: Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by mouth to an unconscious patient. If vomiting occurs give further water. See immediate medical advice.

Note to physician: Treat symptomatically

FIRE FIGHTING MEASURES

Specific Hazards

Non-combustible material. Contact with combustible or organic materials may result in ignition.

Fire Fighting further advice: Not combustible, however material will decompose if involved in a fire. On decomposing may emit toxic fumes, including chlorine, and also oxygen an accelerant. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

Hazchem Code: NOT APPLICABLE

Suitable extinguishing media: Not combustible, however, if material is involved in a fire use water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder)

ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours. Wipe up with absorbent (clean rag or paper towels). Allow absorbent to dry before disposing with normal household garbage. Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS

Clear area of all unprotected personnel. Wear protective equipment to prevent eye and skin contamination and the inhalation of dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. If contamination of sewers or waterways has occurred advise local emergency services.

DANGEROUS GOODS – INITIAL EMERGENCY RESPONSE GUIDE NO. – NOT APPLICABLE

HANDLING AND STORAGE

Handling: Avoid skin and eye contact and inhalation of dust

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from incompatible materials described in section 10. Store away from sources of heat. Keep containers closed when not in use – check regularly for spills

This material is a scheduled Poison S6 and must be stored, maintained and used in accordance with relevant regulations.

EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

No value assigned for this specific material by the National Occupational Health and Safety Commission (NOHSC Australia)

However for

	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Chlorine	1	3	Peak limitation	

As published by the National Occupational Health & Safety Commission (NOHSC Australia)

TWA – The time weighted average airborne concentration over an eight hour working day, for a five-day working week over an entire working life

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STEL - (Short Term Exposure Limit) – The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

Peak Limitation – a ceiling concentration that should not be exceeded over a measurement period, which should be as short as possible, but not exceeding 15 minutes.

These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentration of chemicals. These are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during the products manufacture.

Biological Limit Values: As per the ‘National Model Regulations for the Control of Workplace Hazardous Substances (NOHSC:1005(1994))’ the ingredients in this material do not have a Biological Limit Allocated.

Engineering measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Avoid generating and inhaling dusts. Use with local exhaust ventilation or while wearing appropriate respirator. Chlorine gas vapour is heavier than air – prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use.

Personal protection equipment: overalls, safety shoes, chemical goggles, gloves, dust mask.

Wear overalls, chemical goggles and impervious gloves. Avoid generating and inhaling dust. If dust exists, wear respirator meeting the requirements of AS/NZS 1716. Available information suggests that gloves made from neoprene or nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour:	White granule with slight chlorine odour
Solubility in Water (25C):	1.28g/100mL
Specific Gravity (20C)	2.07
Relative Vapour Density (air=1)	N App
Vapour Pressure (20C)	N App
Flash Point (C)	N App
Flammability Limits (%)	N App
Auto ignition Temperature (C)	N App
Melting Point / Range	226
Boiling Point / Range	N App
Decomposition Point / Range	N Av
pH	3.8
Moisture Content (%)	N Av

Molecular Formula
Molecular Weight

5
C₃Cl₃N₃O₃
232.42

STABILITY AND REACTIVITY

Chemical stability: This material is thermally stable when stored and used as directed.

Conditions to Avoid: Elevated temperatures will result in the material decomposing releasing chlorine gas.

Incompatible Materials: Will react with most organic chemicals. Corrosive to most metals in the presence of moisture.

Hazardous decomposition products: Oxides of carbon and nitrogen, chlorine, smoke and other toxic fumes.

Hazardous reactions: Contact with acids will result in the evolution of chlorine gas.

TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are :

Acute Effects

Inhalation: Material is irritant to mucous membranes and respiratory tract.

Skin contact: Contact with skin may result in irritation

Eye contact: An eye irritant

Ingestion: Harmful if swallowed. Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Long term effects: No information available for product.

Acute toxicity / Chronic toxicity: No LD50 data available for the product.

ECOLOGICAL INFORMATION

Avoid contaminating waterways

Ecotoxicity: No information available

Persistence and degradability: No information available.

Mobility: No information available.

DISPOSAL CONSIDERATIONS

Refer to State / Territory Land Waste Management Authority.

TRANSPORT INFORMATION

Road and Rail Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail

Marine Transport

Not classified as Dangerous Goods by the criteria if the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport

Not Classified as Dangerous Goods by the criteria if the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

REGULATORY INFORMATION

Poisons Schedule (Aust): S6

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS)

CONTACT POINT

Contact

Any advice, recommendation, information, assistance, or service provided by Hy-Clor Australia in relation to the goods supplied by it or their use or application is given in good faith and believed to be appropriate and reliable. However, it is provided with a disclaimer for any liability or responsibility on the part of Hy-Clor Australia Pty Ltd. The customer accepts all risk and responsibility for use of the goods alone, or in combination with other products. All warranties, guarantees and conditions, other than those expressly stated, and whether implied by statute, common law, custom of the trade otherwise, are to the extent that the law permits expressly excluded

Mr Mark Sheridan
Technical Regulations Manager
Telephone (02) 9498-2925

End of report