

Yangzhou Sunchem Co.,Ltd.

Material Safety Data Sheet

Sodium Dichloroisocyanurate

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: SODIUM DICHLOROISOCYANURATE ANHYDROUS

Other name(s): Iso chlor; SDIC; Sodium dichloro-s-triazine trione; Dichloroisocyanuric acid, sodium salt; Neochlor 60; Basolan DC; Bluewater EconoChlor, Sodium troclosene, Stabilised pool chlorine

Recommended Use: Bleach or sanitising chemical.

Supplier: Yangzhou Sunchem Co.,Ltd

9/F Dexing Building, 545 Museum Road, Yangzhou, China.

Tel: 86-514-8785-1548

Fax: 86-514-8787-2867

Email:market@shsunchem.com Http: www.shsunchem.com

2. HAZARDS IDENTIFICATION

This material is hazardous according to criteria of Safe Work Australia; HAZARDOUS SUBSTANCE.

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

Risk Phrases: Contact with combustible material may cause fire. Harmful if swallowed. Contact with acids liberates toxic gas. Irritating to eyes and respiratory system. Very toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment.

Safety Phrases: Keep container dry. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of fire and/or explosion do not breathe fumes. In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible). This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions safety data sheets.

Poisons Schedule: None allocated.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Risk Phrases
Sodium dichloroisocyanurate (630 g/kg available chlorine)	2893-78-9	100%	R8, R22, R31, R36/37, R50/53

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Safety Data Sheet

Inhalation:

Remove victim from area of 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. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Skin Contact:

If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice.

Eye Contact:

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

Ingestion:

Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.

Medical attention and special treatment:

Treat symptomatically. Delayed effects from exposure to chlorine (decomposition product) can include shortness of breath, severe headache, pulmonary oedema and pneumonia.

5. FIRE FIGHTING MEASURES

Hazards from combustion products:

Non combustible, but will support combustion of other materials. Oxidizing substance. Decomposes on heating emitting toxic fumes including those of chlorine and hydrogen chloride.

Precautions for fire fighters and special protective equipment:

Sodium dichloroisocyanurate is a powerful oxidising agent and decomposes violently upon heating liberating oxygen. In case of fire, area must be evacuated and specialist fire fighters called. Only large quantities of water should be used as an extinguishing agent. If excess water is not available DO NOT attempt to extinguish the fire; use available water to prevent the spread of fire to adjacent property. Attending fire fighters should keep upwind if possible and wear full protective equipment including rubber boots and self-contained breathing apparatus. A fire in the vicinity of sodium dichloroisocyanurate should be extinguished in the most practical manner but avoid contaminating this material with the

fire fighting agent, including water. Decomposes on contact with water evolving toxic chlorine gas and in the presence of small amounts of water, the explosive gas nitrogen trichloride. Once fire is extinguished, wash area thoroughly with excess water.

Ensure that drains are not blocked with solid material. Maintenance of excess water during cleaning up operation is essential. Combustible material involved in the incident should be removed to a safe open area for controlled burning or for further drenching with water prior to collection for disposal.

Suitable Extinguishing Media:

Water spray (large quantities).

Unsuitable Extinguishing Media:

DO NOT USE the following as extinguishing media: Dry agent (carbon dioxide, dry chemical powder).

Hazchem Code: 1W

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures:

Clear area of all unprotected personnel. Shut off all possible sources of ignition. Increase ventilation. If contamination of sewers or waterways has occurred advise local emergency services.

Methods and materials for containment and clean up:

Wear protective equipment to prevent skin and eye contact and breathing in vapours. Air-supplied masks are recommended to avoid inhalation of toxic material. DO NOT return spilled material to original container. DO NOT add small amounts of water to sodium dichloroisocyanurate. Collect and transfer to large volume of water - do NOT use a metal container. To neutralise add sodium sulfite (2.4 kg/kg product). If no active chlorine remains, add soda ash (1.1 kg/kg product) to effect complete neutralisation. Where a spill has occurred in a confined space or an inadequately ventilated enclosure and the material is damp and evolving chlorine, the rate of chlorine evolution can be reduced by covering the thinly spread solid with soda ash.

7. HANDLING AND STORAGE

Conditions for safe storage:

Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from foodstuffs. Keep dry - reacts with water, may lead to drum rupture. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for spills.

Precautions for safe handling:

Avoid skin and eye contact and breathing in dust. Keep out of reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: No value assigned for this specific material by the National Occupational Health and Safety Commission. However, Exposure Standard(s) for decomposition product(s):

Chlorine: Peak Limitation = 3 mg/m³ (1 ppm)

As published by the National Occupational Health and Safety Commission.

Peak Limitation - a ceiling concentration which 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 to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Engineering controls:

Ensure ventilation is adequate and that air concentrations of decomposition product(s) is/are controlled below quoted Exposure Standards. Avoid generating and breathing in dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.

Personal Protective Equipment:

The selection of PPE is dependant on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors. Orica Personal Protection Guide No. 1, 1998: F - OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK.

Wear overalls, chemical goggles and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Crystalline Powder, granules or tablets

Colour: White

Odour: Slight Chlorine

Molecular Formula: C₃HCl₂N₃O₃.Na

Solubility: Soluble in water.

Specific Gravity: 2.03 (water = 1)

Flash Point (°C): Not applicable

Flammability Limits (%): Not applicable

Solubility in water (g/L): 250 @ 25°C

Melting Point/Range (°C): 240

Decomposition Point (°C): 240

pH: 6.5 (1% solution)

10. STABILITY AND REACTIVITY

Chemical stability: Powerful oxidising agent. Sodium dichloroisocyanurate reacts with water and acids evolving toxic chlorine gas and in the presence of small amounts of water, the explosive gas nitrogen trichloride. Decomposes in alkaline conditions evolving carbon dioxide, nitrogen and chloramine gases. Slightly hygroscopic.

Conditions to avoid: Avoid exposure to moisture. Avoid exposure to heat. Avoid exposure to direct sunlight. Avoid contact with other chemicals.

Incompatible materials: Incompatible with combustible materials, ammonium salts, nitrogenous materials, acids, and water. Incompatible with reducing agents.

Hazardous decomposition

products:

Chlorine.

Hazardous reactions: Sodium dichloroisocyanurate reacts with water and acids evolving toxic chlorine gas and in the presence of small amounts of water, the explosive gas nitrogen trichloride. Decomposes in alkaline conditions evolving carbon dioxide, nitrogen and chloramine gases.

11. 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:

Ingestion: Swallowing can result in nausea, vomiting, diarrhoea, and gastrointestinal irritation.

Eye contact: An eye irritant.

Skin contact: Contact with skin may result in irritation.

Inhalation: Material is irritant to the mucous membranes of the respiratory tract (airways). Inhalation of high concentrations may result in shortness of breath, chest pain, severe headache and lung damage including pulmonary oedema. Effects may be delayed.

Long Term Effects:

No information available for the product.

Toxicological Data:

Oral LD50 (rat): 1420 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity Avoid contaminating waterways.

Aquatic toxicity: Very toxic to aquatic organisms. May cause long term adverse effects in the aquatic Environment.

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to Waste Management Authority. Dispose of material through a licensed waste

contractor. Add sodium dichloroisocyanurate into dilute solution of sodium hydroxide or soda ash with stirring gradually and neutralize that solution with reduction agents such as sodium sulfite and sodium thiosulfate. Adjust pH with sulfuric acid or hydrochloric acid to make neutral solution and dispose.

14. TRANSPORT INFORMATION

Road and Rail Transport

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

UN No: 2465

Class-primary 5.1 Oxidizing Agent

Packing Group: II

Proper Shipping Name: DICHLOROISOCYANURIC ACID SALTS

Hazchem Code: 1W

Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN No: 2465

Class-primary: 5.1 Oxidizing Agent

Packing Group: II

Proper Shipping Name: DICHLOROISOCYANURIC ACID SALTS

Air Transport

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN No: 2465

Class-primary: 5.1 Oxidizing Agent

Packing Group: II

Proper Shipping Name: DICHLOROISOCYANURIC ACID SALTS

15. REGULATORY INFORMATION

Classification: This material is hazardous according to criteria of Safe Work Australia; HAZARDOUS SUBSTANCE.

Hazard Category: Xn: Harmful

Xi: Irritant

O: Oxidising

N: Dangerous for the Environment

Risk Phrase(s): 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: Very toxic to aquatic organisms.

R53: May cause long term adverse effects in the aquatic environment.

Safety Phrase(s): S8: Keep container dry.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S41: In case of fire and/or explosion do not breathe fumes.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible).

S60: This material and its container must be disposed of as hazardous waste.

S61: Avoid release to the environment. Refer to special instructions Safety Data Sheets.

Poisons Schedule: None allocated.

16. OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use.