

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Sodium dichloroisocyanurate, dihydrate

Version 1.2

Issue date: 04/02/2024

Revision date: 04/02/2024

SDS Record Number: CSSS-TCO-010-112687

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Identification on the label/Trade name: Sodium dichloroisocyanurate, dihydrate
Additional identification: Not available
Identification of the product: CAS# 51580-86-0; EC# 220-767-7
Index Number: 613-030-01-7
REACH pre-registration No.: Not available

1.2 Relevant identified uses of the substance and uses advised against:

1.2.1 Identified uses:

Disinfectant, water treatment.

1.2.2 Uses advised against:

Not available.

1.3 Details of the supplier of the safety data sheet:

Supplier(Only representative): -
Supplier(Manufacturer): Qingdao Kingnod Group Co.,LTD.
Address: NO.1,XIANGLING ROAD,QINGDAO CITY,SHANDONG CHINA.
Contact person(E-mail): kingnodchem@163.com
Telephone: +86-532-66060752
Fax: +86-532-66060752

1.4 Emergency telephone Number:

+86-532-66060752 83875218 (Only available during office hours (9:00a.m.-17:00p.m.)

Available outside office hours?

YES

☐

NO

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Section 2 Hazards Identification

2.1 Classification of the substance/mixture:

2.1.1 Classification:

The substance is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard statement
Acute Tox. 4	H302
Eye Irrit. 2	H319
STOT SE 3	H335
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

For full text of H- phrases: see section 2.2.

2.2 label elements:

Product name: Sodium dichloroisocyanurate, dihydrate

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Hazard Pictograms:**Signal Word(S):**

Warning

Hazard Statement:

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 statement:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

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

P330: Rinse mouth.

P337 + P313: If eye irritation persists: Get medical advice/attention.

P391: Collect spillage.

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container in according with local regulation.

2.3 Other hazards:

Contact with acids liberates toxic gas.

Section 3 Composition/information on ingredients**Substance/Mixture:**

Substance

Ingredient(s):

Chemical Name	Pre-Registration No.	CAS No.	EC No.	Concentration
Sodium dichloroisocyanurate, dihydrate	N/A	51580-86-0	220-767-7	100%

Section 4 First aid measures**4.1 Description of first aid measures:**

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

If adverse effects occur remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. If respiration or pulse has stopped, have a trained person administer Basic Life Support.

4.1.2 In case of skin contact:

Immediately flush contaminated areas with water. Remove contaminated clothing. Wash contaminated areas with soap and water. Thoroughly clean and dry contaminated clothing and shoes before reuse. If irritation occurs, get medical help.

4.1.3 In case of eyes contact:

Immediately flush eye with a directed stream of water for at least 15 minutes.

4.1.4 In case of ingestion:

If victim is conscious and alert, allow to rinse mouth and then drink two cups of water. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs spontaneously, keep airway clear. Drink more water when vomiting stops. Seek medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed:

Harmful if swallowed. Causes serious eye irritation. May cause respiratory irritation.

4.3 Indication of any immediate medical attention and special treatment needed:

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Fire-Fighting measures

5.1 Extinguishing media:

Suitable extinguishing media:

Powder, carbon dioxide, foam.

Unsuitable extinguishing media:

Do not use ABC extinguishers containing nitrogen, due to risk of violent chemical reaction.

5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced: nitrogen oxides (NO_x), hydrogen chloride (HCl), chlorine.

5.3 Special fire fighting methods and special protective actions for fire-fighters:

Fire-fighters should wear full protective clothing and self-contained breathing apparatus (SCBA).

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel:

Avoid contact with skin and eyes. Avoid formation of dust. Provide appropriate exhaust ventilation at places where dust is formed. Keep unnecessary people away, isolate hazard area and deny entry.

6.1.2 For emergency responders:

Wear an appropriate NIOSH/MSHA approved respirator if mist, vapor or dust is generated.

6.2 Environmental Precautions:

Do not allow material to be released to the environment without proper governmental permits. Very toxic to aquatic life with long lasting effects.

6.3 Methods for Containment and Cleaning up:

DO NOT add water to spilled materials. DO NOT use floor sweeping compounds to clean up spills. Sweep and scoop spilled material into clean, dedicated equipment. Every attempt should be made to avoid mixing spilled material with other chemicals or debris when cleaning up. DO NOT attempt to reseal any contaminated drums. DO NOT transport wet or damp material.

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 information on disposal.

6.5 Additional information:

Not applicable.

Section 7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures:

Do not get in eyes, on skin or on clothing. Avoid breathing vapours when opening container. Avoid creation of dust. Wash thoroughly after handling. Never add water to the product. Always add product to large quantities of water. Use clean dry utensils. Do not add the product to any dispensing device containing residuals of other products.

7.1.2 Advice on general occupational hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas. Provide adequate ventilation. Avoid contact with the skin and eyes.

7.2 Conditions for safe storage, including any incompatibilities:

Store and handle in accordance with current regulations and standards. Do not allow water to get in container. Keep container tightly closed and properly labelled. Store containers on pallets. Keep away from food, drink and animal feed. Keep separated from incompatible substances.

7.3 Specific end use(s):

Not applicable.

Section 8 Exposure Controls/Personal Protection

8.1 Control parameters:

8.1.1 Occupational exposure limits:

Not available.

8.1.2 Additional exposure limits under the conditions of use:

Not available.

8.1.3 DNEL/DMEL and PNEC-Values:

Not available.

8.2 Exposure controls:

8.2.1 Appropriate engineering controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection:

Tightly sealed goggles.

Hand protection:

Type of gloves recommended –Nitrile rubber.

Minimum breakthrough time / gloves: 480 min.

Minimum thickness / gloves 0.11 mm.

Body protection:

Plastic apron, sleeves, boots, if handling large quantities.

Respiratory protection:

Use respiratory protection for chlorine and dust inhalation protection.

Thermal hazards:

Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls:

Avoid discharge into the environment.

According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:

Solid

Colour:

White (Sodium dichloroisocyanurate)

Odour:

Chlorine odor(Sodium dichloroisocyanurate)

Odour threshold:

Not available

pH:

Not available

Melting point/range (°C):

Not available

Boiling point/range (°C):	Not available
Flash point (°C):	Not available
Evaporation rate:	Not available
Flammability limit - lower (%):	Not available
Flammability (solid, gas):	Non-flammable
Ignition temperature (°C):	Not available
Upper/lower flammability/explosive limits:	Not available
Vapour pressure (20°C):	< 0.006 Pa (Sodium dichloroisocyanurate)
Vapour density:	Not available
Relative Density:	1.97 (Sodium dichloroisocyanurate)
Bulk density (kg/m ³):	Not available
Water solubility (g/l):	248.2 g/L (PH=4.47, Sodium dichloroisocyanurate)
n-Octanol/Water (log Po/w):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	252 °C (Sodium dichloroisocyanurate)
Viscosity, dynamic (mPa.s):	Not available
Explosive properties:	Product is explosive (Sodium dichloroisocyanurate)
Oxidising properties:	Non-oxidising
Molecular Formula:	C3Cl2N3O3.Na.2H2O
Molecular Weight:	255.98

9.2. Other information:

Fat solubility(solvent– oil to be specified) etc:	Not available
Surface tension:	Not available
Dissociation constant in water(pKa):	Not available
Oxidation-reduction Potential:	Not available
Specific gravity:	Not available

Section 10 Stability and reactivity

10.1 Reactivity:	The substance is stable under normal storage and handling conditions.
10.2 Chemical stability:	Stable at room temperature in closed containers under normal storage and handling conditions.
10.3 Possibility of hazardous reactions:	Gives off hydrogen by reaction with metals. Contact with acids liberates toxic gas.
10.4 Conditions to avoid:	Incompatible materials. High temperature. Poor ventilation. Moisture/high humidity.
10.5 Incompatible materials:	Acids, water.
10.6 Hazardous decomposition products:	Nitrogen oxides (NOx), hydrogen chloride (HCl), chlorine.

Section 11 Toxicological information

11.1 Toxicokinetics, metabolism and distribution:

Non-human toxikological data:	Not available
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11.2 Information on toxicological effects:

Acute toxicity:

LD50(Oral, Rat):	1671 mg/kg bw(female), 2094 mg/kg bw(male) (Sodium dichloroisocyanurate)
LD50(Dermal, Rabbit):	> 5000 mg/kg bw (Sodium dichloroisocyanurate)
LC50(Inhalation, Rat):	0.27-1.17 mg/L/4h air(Sodium dichloroisocyanurate)
Skin corrosion/Irritation:	Non irritant
Serious eye damage/irritation:	Causes serious eye irritation.
Respiratory or skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
STOT- single exposure:	May cause respiratory irritation.
STOT-repeated exposure:	Not classified
Aspiration hazard:	Not classified

Section 12 Ecological information

Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	N/A	96h	Fish	OECD 203	N/A	N/A
EC50	N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	72h	Algae	OECD 201	N/A	N/A

Persistence and degradability:	Not available.
Bioaccumulative potential:	Not available.
Mobility in soil:	Not available.
Results of PBT&vPvB assessment:	Not available.
Other adverse effects:	Do not empty into drains.

Section 13 Disposal considerations

13.1 Waste treatment methods:	Due to the high risk of contamination recycling/recovery is not recommended. Waste disposal in accordance with regulations (most probably controlled incineration).
13.2 Product / Packaging disposal:	According to local regulations. Emptied container might retain product residues. Follow all warnings even after the container is emptied.

Section 14 Transport information

	Land transport(ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	3077	3077	3077
UN Proper shipping name	Environmentally Hazardous substance, Solid, n.o.s. (Sodium dichloroisocyanurate, dihydrate)	Environmentally Hazardous substance, Solid, n.o.s. (Sodium dichloroisocyanurate, dihydrate)	Environmentally Hazardous substance, Solid, n.o.s. (Sodium dichloroisocyanurate, dihydrate)
Transport hazard Class	9	9	9

Packaging group	III	III	III
Environmental hazards	Yes	Yes	Yes
Special precautions for user	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	IBC08	IBC08	IBC08

Section 15 Regulation information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Relevant information regarding authorization:	Not applicable.
Relevant information regarding restriction:	Not applicable.
Other EU regulations:	Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.
Other National regulations:	Not applicable
Chemical Safety Assessment has been carried out?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>

Section 16 Other information

16.1 Indication of changes:

Version 1.2 Amended by EU No 453/2010

16.2 Training instructions:

Not applicable.

16.3 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.4 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.