Sodium dichloroisocyanurate
sc-236901

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME
Sodium dichloroisocyanurate

STATEMENT OF HAZARDOUS NATURE

SUPPLIER
Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, California 95060
800.457.3801 or 831.457.3800

EMERGENCY
ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255
(1-800-CHEMCALL) or call +613 9573 3112

SYNONYMS

Section 2 - HAZARDS IDENTIFICATION

CHEMWATCH HAZARD RATINGS

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Toxicity</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Body Contact</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Reactivity</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Chronic</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW

RISK
Risk of explosion by shock, friction, fire or other sources of ignition.
Contact with combustible material may cause fire.
Contact with acids liberates toxic gas.
Harmful by inhalation and if swallowed.
Irritating to eyes, respiratory system and skin.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Cumulative effects may result following exposure*.
May be harmful to the foetus/embryo*.
* (limited evidence).

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED
- Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.
- Oral intake of dichloroisocyanurates is corrosive to the mouth, gullet and internal organs, depending on the concentration and may result in weakness, lethargy, tremors, salivation, excessive secretion of tears and possible coma.
- Its toxicity seems to be mainly related to the corrosive effect on the stomach lining.
- Single and repeated dose studies in animals by oral and skin routes of cyanuric acid and some cyanurates generally show a low degree of toxicity.

At high doses several studies showed kidney damage.
- Triazine derivatives have been shown to cause structural damage to the liver in animal studies.

EYE
- This material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation.
- Moderate inflammation may be expected with redness; conjunctivitis may occur with prolonged exposure.

SKIN
- The material may cause severe inflammation of the skin either following direct contact or after a delay of some time.
- Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.
- Open cuts, abraded or irritated skin should not be exposed to this material.
- Solution of material in moisture on the skin, or perspiration, may increase irritant effects.
- Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.
- Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

INHALED
- Inhalation of dusts, generated by the material, during the course of normal handling, may be harmful.
- The material can cause respiratory irritation in some persons.
- The body's response to such irritation can cause further lung damage.
- Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.
- If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures.
- Chlorine vapour is extremely irritating to the airways and lungs, causing coughing, choking, breathing difficulty, chest pain, headache, vomiting, fluid accumulation in the lungs, chest infection and loss of consciousness.
- Effects may be delayed.
- Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas.
- Vapour is heavier than air and may displace and replace air in breathing zone, acting as a simple asphyxiant.
- Inhalation of the vapour is hazardous and may even be fatal.

CHRONIC HEALTH EFFECTS
- Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems.
- Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.
- There is some evidence from animal testing that exposure to this material may result in toxic effects to the unborn baby.
- Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung. Prime symptom is breathlessness; lung shadows show on X-ray.
- Reduced respiratory capacity may result from chronic low level exposure to chlorine gas. Chronic poisoning may result in coughing, severe chest pains, sore throat and haemoptysis (bloody sputum).
Delayed effects can include shortness of breath, violent headaches, pulmonary oedema and pneumonia. The chlorinated isocyanurates have low acute manifestation. It irritates the eyes and skin but is not considered to be skin sensitizers. Studies show that it does not cause cancer or foetal toxicity on acute exposure. However, on chronic inhalation and ingestion exposure, it produces toxicity involving organ damage, breathing difficulty, headaches and possibly reproductive and foetal toxicity. Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis). Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Gastrointestinal disturbances may also occur. Chronic exposures may result in dermatitis and/or conjunctivitis. Experimental studies on laboratory animals indicate possible teratogenic and other reproductive effects. [BASF]

**Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>NAME</th>
<th>CAS RN</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium dichloroisocyanurate</td>
<td>2893-78-9</td>
<td>&gt;95</td>
</tr>
<tr>
<td>In presence of moisture/water evolves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>chlorine</td>
<td>7782-50-5</td>
<td>2</td>
</tr>
</tbody>
</table>

**Section 4 - FIRST AID MEASURES**

**SWALLOWED**
- IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.
- For advice, contact a Poisons Information Centre or a doctor.
- Urgent hospital treatment is likely to be needed.
- In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition.

If vomiting occurs, give more water.

**EYE**
If this product comes in contact with the eyes:
- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

**SKIN**
If skin contact occurs:
- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

**INHALED**
- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema.
- Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs).
- As this reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest (preferably in semi-recumbent posture) and must be kept under medical observation even if no symptoms are (yet) manifested.
- Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered.

**NOTES TO PHYSICIAN**
- Excellent warning properties force rapid escape of personnel from chlorine vapour thus most inhalations are mild to moderate. If escape is not possible, exposure to high concentrations for a very short time can result in dyspnea, haemophysis and cyanosis with later complications being tracheobroncho-pneumonitis and pulmonary oedema.
- Depending on the degree of exposure, periodic medical examination is indicated. The symptoms of lung oedema often do not manifest until a few hours have passed and they are aggravated by physical effort.

**Section 5 - FIRE FIGHTING MEASURES**

| Vapour Pressure (mmHG): | Not available. |
Upper Explosive Limit (%): Not Available
Specific Gravity (water=1): 0.91-1.00
Lower Explosive Limit (%): Not Available

EXTINGUISHING MEDIA
FOR SMALL FIRE:
- USE FLOODING QUANTITIES OF WATER.
- DO NOT use dry chemical, CO2, foam or halogenated-type extinguishers.
FOR LARGE FIRE
- Flood fire area with water from a protected position

FIRE FIGHTING
- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water courses.
When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 800 metres in all directions.

GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS
- Combustible solid which burns but propagates flame with difficulty; it is estimated that most organic dusts are combustible (circa 70%) - according to the circumstances under which the combustion process occurs, such materials may cause fires and / or dust explosions.
- Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions).
- Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust (420 micron or less) may burn rapidly and fiercely if ignited - particles exceeding this limit will generally not form flammable dust clouds; once initiated, however, larger particles up to 1400 microns diameter will contribute to the propagation of an explosion.
- In the same way as gases and vapours, dusts in the form of a cloud are only ignitable over a range of concentrations; in principle, the concepts of lower explosive limit (LEL) and upper explosive limit (UEL) are applicable to dust clouds but only the LEL is of practical use; this is because of the inherent difficulty of achieving homogeneous dust clouds at high temperatures (for dusts the LEL is often called the "Minimum Explosible Concentration", MEC)
Combustion products include: carbon monoxide (CO), carbon dioxide (CO2), hydrogen chloride, phosgene, nitrogen oxides (NOx), other pyrolysis products typical of burning organic material.
Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

FIRE INCOMPATIBILITY
- Avoid storage with reducing agents.
- Avoid any contamination of this material as it is very reactive and any contamination is potentially hazardous

MINOR SPILLS
- Clean up all spills immediately.
- No smoking, naked lights, ignition sources.
- Avoid all contact with any organic matter including fuel, solvents, sawdust, paper or cloth and other incompatible materials, as ignition may result.
- Avoid breathing dust or vapours and all contact with skin and eyes.

MAJOR SPILLS
- DO NOT touch the spill material
- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear full body protective clothing with breathing apparatus.

PROCEDURE FOR HANDLING
Contains low boiling substance:
Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.
- Check for bulging containers.
- Vent periodically
- Always release caps or seals slowly to ensure slow dissipation of vapours
- Avoid personal contact and inhalation of dust, mist or vapours.
• Provide adequate ventilation.
• Always wear protective equipment and wash off any spillage from clothing.
• Keep material away from light, heat, flammables or combustibles.
• Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions)
• Minimise airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, and flame.
• Establish good housekeeping practices.
• Remove dust accumulations on a regular basis by vacuuming or gentle sweeping to avoid creating dust clouds.

RECOMMENDED STORAGE METHODS
• Glass container is suitable for laboratory quantities
• DO NOT use aluminium, galvanised or tin-plated containers
• DO NOT use unlined steel containers
• DO NOT repack. Use containers supplied by manufacturer only.

For low viscosity materials
• Drums and jerricans must be of the non-removable head type.
• Where a can is to be used as an inner package, the can must have a screwed enclosure.

STORAGE REQUIREMENTS
In addition, Goods of Class 5.1, packing group II should be:
• stored in piles so that
• the height of the pile does not exceed 1 metre
• the maximum quantity in a pile or building does not exceed 1000 tonnes unless the area is provided with automatic fire extinguishers
• the maximum height of a pile does not exceed 3 metres where the room is provided with automatic fire extinguishers or 2 meters if not.

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

<table>
<thead>
<tr>
<th>Source</th>
<th>Material</th>
<th>TWA ppm</th>
<th>TWA mg/m³</th>
<th>STEL ppm</th>
<th>STEL mg/m³</th>
<th>Peak ppm</th>
<th>Peak mg/m³</th>
<th>TWA F/CC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>US ACGIH Threshold Limit</td>
<td>sodium dichloroisocyanurate</td>
<td>0.5</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TLV® Basis:</td>
</tr>
<tr>
<td>Values (TLV)</td>
<td>(Chlorine)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>URT &amp; eye irr</td>
</tr>
</tbody>
</table>

PERSONAL PROTECTION

RESPIRATOR
• Type AB-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

EYE
• Chemical goggles.
• Full face shield may be required for supplementary but never for primary protection of eyes
• Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

HANDS/FEET
• Wear chemical protective gloves, eg. PVC.
• Wear safety footwear or safety gumboots, eg. Rubber

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:
frequency and duration of contact,
chemical resistance of glove material,
glove thickness and
dexterity
Neoprene gloves
DO NOT wear cotton or cotton-backed gloves.
DO NOT wear leather gloves.
Promptly hose all spills off leather shoes or boots or ensure that such footwear is protected with PVC over-shoes.

OTHER
- Overalls.
- PVC Apron.
- PVC protective suit may be required if exposure severe.
- Eyewash unit.
- Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.
- For large scale or continuous use wear light-weave non-static clothing (no metallic fasteners, cuffs or pockets), non sparking safety footwear.

ENGINEERING CONTROLS
- Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.
- The basic types of engineering controls are:
  - Process controls which involve changing the way a job activity or process is done to reduce the risk.
  - Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

<table>
<thead>
<tr>
<th>State</th>
<th>Divided solid</th>
<th>Molecular Weight</th>
<th>219.95</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting Range (°F)</td>
<td>464- 482 (decomp)</td>
<td>Viscosity</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Boiling Range (°F)</td>
<td>Not applicable.</td>
<td>Solubility in water (g/L)</td>
<td>Miscible</td>
</tr>
<tr>
<td>Flash Point (°F)</td>
<td>Not Available</td>
<td>pH (1% solution)</td>
<td>5.8-7.0 @ 1%</td>
</tr>
<tr>
<td>Decomposition Temp (°F)</td>
<td>446- 464</td>
<td>pH (as supplied)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Autoignition Temp (°F)</td>
<td>Not available</td>
<td>Vapour Pressure (mmHG)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Upper Explosive Limit (%)</td>
<td>Not Available</td>
<td>Specific Gravity (water=1)</td>
<td>0.91-1.00</td>
</tr>
<tr>
<td>Lower Explosive Limit (%)</td>
<td>Not Available</td>
<td>Relative Vapour Density (air=1)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Volatile Component (%vol)</td>
<td>Nil @ 38 C.</td>
<td>Evaporation Rate</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

APPEARANCE
- Crystalline powder. Slight chlorine odour. Strong oxidising material. Soluble in water and decomposes to Chlorine gas, hypochlorous acid and cyanuric acid. Anhydrous form contains 64.5% available chlorine CAS 2893-78-9. Loose bulk density about 0.6 g/cc: granulated 0.91 g/cc. Note: Commercial grades are usually the dihydrate form which contains 56% available chlorine [CAS 51580-86-0]. Its transport is not regulated under the provision of SP139 of the Aust. DG Code.

<table>
<thead>
<tr>
<th>CONDITIONS CONTRIBUTING TO INSTABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of incompatible materials.</td>
</tr>
<tr>
<td>Product is considered stable under normal handling conditions.</td>
</tr>
<tr>
<td>Prolonged exposure to heat.</td>
</tr>
<tr>
<td>Hazardous polymerisation will not occur.</td>
</tr>
</tbody>
</table>

Section 10 - CHEMICAL STABILITY
STORAGE INCOMPATIBILITY

- Contact with acids produces toxic fumes
- Chlorine:
  - is a strong oxidiser
  - reacts explosively with acetylene, boron, diborane, or other boron hydrides at ordinary temperatures
  - forms easily ignited, sensitive explosive mixtures with gases and vapours such as anhydrous ammonia, benzene, butane, ethane, ethylene, fluorine, hydrocarbons, formaldehyde, hydrogen, hydrogen bromide, hydrogen chloride, oxygen, propane, propene in the presence of heat, hot surfaces, welding arc, sparks, strong sunlight, UV light, or a catalyst such as mercury oxide
  - contact with 2-carboxymethylisothiouronium chloride or s-ethylisothiouronium hydrogen sulfate may form nitrogen trichloride. a dangerous explosive
  - Avoid any contamination of this material as it is very reactive and any contamination is potentially hazardous
  - Segregate from alcohol, water.
- Avoid storage of dichloroisocyanurates with ammonia, urea or similar nitrogen containing compounds, inorganic reducing compounds, calcium hypochlorite, alkalies and water.
- Corrosive to most metals in the presence of moisture.
- Many compounds containing more than one N-halogen bond are unstable and exhibit explosive properties.
- BRETERICK L.: Handbook of Reactive Chemical Hazards.
- Avoid strong bases.
- Inorganic reducing agents react with oxidizing agents to generate heat and products that may be flammable, combustible, or otherwise reactive. Their reactions with oxidizing agents may be violent.
- Avoid storage with reducing agents.

For incompatible materials - refer to Section 7 - Handling and Storage.

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**Section 11 - TOXICOLOGICAL INFORMATION**

**sodium dichloroisocyanurate**

**TOXICITY AND IRRITATION**

- Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergic condition known as reactive Airways Dysfunction Syndrome (RADS) which can occur following exposure to high levels of highly irritating compound.
- The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
- The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration.

**CARCINOGEN**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>US - Rhode Island Hazardous Substance List</th>
<th>IARC</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium dichloroisocyanurate</td>
<td></td>
<td>IARC</td>
</tr>
<tr>
<td>Chlorine</td>
<td>US ACGIH Threshold Limit Values (TLV)</td>
<td>Carcinogen Category</td>
</tr>
<tr>
<td></td>
<td>- Carcinogens</td>
<td>A4</td>
</tr>
<tr>
<td>chlorine</td>
<td>US - Rhode Island Hazardous Substance List</td>
<td>IARC</td>
</tr>
<tr>
<td>chlorine</td>
<td>Canada - Prince Edward Island</td>
<td>Notes</td>
</tr>
<tr>
<td></td>
<td>Occupational Exposure Limits - Carcinogens</td>
<td>TLV Basis: upper respiratory tract &amp; eye irritation</td>
</tr>
</tbody>
</table>

**Section 12 - ECOLOGICAL INFORMATION**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/ safety data sheets.

**Ecotoxicity**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Persistence: Water/Soil</th>
<th>Persistence: Air</th>
<th>Bioaccumulation</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>chlorine</td>
<td>No Data Available</td>
<td>No Data Available</td>
<td>LOW</td>
<td></td>
</tr>
</tbody>
</table>
Section 13 - DISPOSAL CONSIDERATIONS

US EPA Waste Number & Descriptions
A. General Product Information
Ignitability characteristic: use EPA hazardous waste number D001 (waste code I)
Reactivity characteristic: use EPA hazardous waste number D003 (waste code R).

Disposal Instructions
All waste must be handled in accordance with local, state and federal regulations.
- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.
Otherwise:
- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- Where possible retain label warnings and MSDS and observe all notices pertaining to the product.
Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.
A Hierarchy of Controls seems to be common - the user should investigate:
- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate. In most instances the supplier of the material should be consulted.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
sodium dichloroisocyanurate (CAS: 2893-78-9) is found on the following regulatory lists:

- "Canada - Alberta Ambient Air Quality Objectives"
- "Canada - Alberta Occupational Exposure Limits"
- "Canada - British Columbia Occupational Exposure Limits"
- "Canada - Northwest Territories Occupational Exposure Limits (English)"
- "Canada - Nova Scotia Occupational Exposure Limits"
- "Canada - Prince Edward Island Occupational Exposure Limits"
- "Canada - Quebec Permissible Exposure Values for Airborne Contaminants (English)"
- "Canada - Saskatchewan Industrial Hazardous Substances"
- "Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits"
- "Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances"
- "Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Inherently Toxic to the Environment (English)"
- "Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Persistently Toxic and Inherently Toxic to the Environment (French)"
- "Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Persistent and Inherently Toxic to the Environment (French)"
- "Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that meet the ecological criteria for categorization (English)"
- "Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that meet the human health criteria for categorization (English)"
- "Canada Domestic Substances List (DSL)"
- "Canada Ingredient Disclosure List (SOR/88-64)"
- "Canada List of Prohibited and Restricted Cosmetic Ingredients (The Cosmetic Ingredient "Hotlist")"
- "Canada National Pollutant Release Inventory (NPRI)"
- "Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS (English)"
- "International Air Transport Association (IATA) Dangerous Goods Regulations"
- "International Council of Chemical Associations (ICCA) - High Production Volume List"
- "OECD List of High Production Volume (HPV) Chemicals"
- "US - Alaska Limits for Air Contaminants"
- "US - California Air Toxics "Hot Spots" List (Assembly Bill 2588) Substances for Which Emissions Must Be Quantified"
- "US - California Occupational Safety and Health Regulations (CAL/OSHA) - Hazardous Substances List"
- "US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs)"
- "US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs)"
- "US - California Permissible Exposure Limits for Chemical Contaminants"
- "US - California Toxic Air Contaminant List Category II"
- "US - Connecticut Hazardous Air Pollutants"
- "US - Delaware Pollutant Discharge Requirements - Reportable Quantities"
- "US - Hawaii Air Contaminant Limits"
- "US - Idaho - Limits for Air Contaminants"
- "US - Louisiana Minimum Emission Rates Toxic Air Pollutants"
- "US - Louisiana Toxic Air Pollutant Ambient Air Standards"
- "US - Massachusetts Oil & Hazardous Material List"
- "US - Michigan Exposure Limits for Air Contaminants"
- "US - Minnesota Permissible Exposure Limits (PELs)"
- "US - New Jersey Right to Know Hazardous Substances (English)"
- "US - North Dakota Air Pollutants - Guideline Concentrations"
- "US - Oregon Hazardous Materials"
- "US - Oregon Permissible Exposure Limits (Z-1)"
- "US - Pennsylvania - Hazardous Substance List"
- "US - Rhode Island Hazardous Substance List"
- "US - South Dakota Drinking Water Standards - Disinfectants"
- "US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants"
- "US - Utah Primary Drinking Water Standards - Disinfectant Residuals"
- "US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants"
- "US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants"

**Regulations for ingredients**

chlorine (CAS: 7782-50-5) is found on the following regulatory lists:

Section 16 - OTHER INFORMATION

LIMITED EVIDENCE

- Cumulative effects may result following exposure*.
- May be harmful to the foetus/embryo*.
- Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references. A list of reference resources used to assist the committee may be found at: www.chemwatch.net/references.
- The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.
- For detailed advice on Personal Protective Equipment, refer to the following U.S. Regulations and Standards:
  - OSHA Standards - 29 CFR:
    - 1910.132 - Personal Protective Equipment - General requirements
    - 1910.133 - Eye and face protection
    - 1910.134 - Respiratory Protection
    - 1910.136 - Occupational foot protection
    - 1910.138 - Hand Protection
  - Eye and face protection - ANSI Z87.1
  - Foot protection - ANSI Z41
  - Respirators must be NIOSH approved.

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