Material Safety Data Sheet
Sodium Dichloro Isocyanurate

Section 1: Chemical Product and Company Identification

| Product Name: Sodium Dichloro Isocyanurate, 60 |
| Customs Tariff No: 29336960 |
| Synonym Name: Sodium Dichloro-s-Triazinetrione,Anhydrous; 1,3,5-triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt |
| Chemical Formula: C₃O₃N₃Cl₂Na |
| Company Information |
| Chemtrade International |
| Rm. 201, Unit 3, Building 8, Shijia Garden, No. 93, Xiangjiang Road, Qingdao Development Zone, Qingdao, Shandong, China 266555 |
| Tel: 0086-532-86893005 |
| Fax: 0086-532-86893005 |

Section 2: Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No.</th>
<th>EINECS No.</th>
<th>% by weight</th>
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</thead>
<tbody>
<tr>
<td>Sodium Dichloro Isocyanurate</td>
<td>2893-78-9</td>
<td></td>
<td>60</td>
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Section 3: Hazards Identification

Potential Acute Health Effects
Extremely hazardous in case of ingestion. Very hazardous in case of skin contact (corrosive, irritant), of eye contact (irritant), of inhalation. The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Prolonged exposure may result in skin burns and ulcerations. Over-exposure by inhalation may cause respiratory irritation. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects
CARCINOGENIC EFFECTS: N/A
MUTAGENIC EFFECTS: N/A
TERATOGENIC EFFECTS: N/A
DEVELOPMENTAL TOXICITY: N/A
Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.
Section 5: Fire and Explosion Data

The Product is: May be combustible at high temperature.

Auto-Ignition Temperature N/A
Flash Points N/A
Flammable Limits N/A
Products of Combustion N/A

Fire Hazards in presence of Substances Various
Flammable in combustible materials, of Presence of organic materials.

Explosion Hazard in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact : N/A
Risks of explosion of the product in presence of static discharge : N/A
Explosive in presence of organic materials.

Fire Fighting Media and Instructions: Oxidizing material.
DO NOT use water jet.
Use flooding quantities of water.
Avoid contact with organic materials.

Special Remarks on Fire Hazards
No additional remark.

Special Remarks No additional remark.

Section 6: Accidental Release Measures

Small Spill
Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill
Oxidizing material. Corrosive solid.
Stop leak if without risk. DO NOT get water inside container. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substances damp using water spray. DO NOT touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all sources of ignition. Call for assistance on disposal.

Section 7: Handling and Storage

Section 4: First Aid Measures

Eye Contact
Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. COLD water may be used. DO NOT use an eye ointment. Seek medical attention.

Skin Contact
If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical touches the victim's exposed skin, such as the hands; Gently and thoroughly wash the contaminated skin with running water and nonabrasive soap. Be particularly careful to clean folds, crevices, creases and groin. COLD water may be used. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Hazardous Skin Contact
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion
DO NOT induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Hazardous Ingestion
No additional information.
**Precautions**
Keep locked up. Keep container dry. Keep away from heat. Keep away from sources of ignition. Keep away from combustible materials. Empty containers pose a fire risk; evaporate the residue under a fume hood. Ground all equipment containing material. DO NOT ingest. DO NOT breathe dust. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, reducing agents, combustible materials, organic materials, acids.

**Storage**
Keep container dry. Keep in a cool place. Ground all equipment containing material. Corrosive materials should be stored in a separate safety storage cabinet or room.

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**Section 8: Exposure Controls/Personal Protection**

**Engineering Controls**
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection**
Splash goggles. Lab coat. Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill**
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits**
N/A

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**Section 9: Physical and Chemical Properties**

Physical State and Appearance Solid. (Granular solid. Powdered solid.)
Color White.
Odor Pungent. Chlorine
Molecular Weight 220.96 g/mole
Taste N/A
pH (1% soln/water) 6 [Acidic.]
Boiling Point N/A
Melting Point N/A
Critical Temperature N/A
Specific Gravity 0.96 (Water = 1)
Vapor Pressure 0 mm of Hg (@ 20°C)
Vapor Density 9.04 (Air = 1)
Volutility N/A
Odor Threshold N/A
Evaporation rate N/A
Viscosity N/A
Water/Oil Dist. Coeff. N/A
Ionicity (in Water) N/A
Dispersion Properties See solubility in water.
Solubility Soluble in cold water.
Very slightly soluble in acetone.

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**Section 10: Stability and Reactivity Data**
Stability
The product is stable.

Instability Temperature N/A

Conditions of Instability
Contact with ammonia, ammonium salts, urea or similar compounds, which contain nitrogen, may form nitrogen trichloride a highly explosive compound. Mixture with nonionic surface active agents may result in exothermic reactions causing fire or explosion. Keep away from heat.

Incompatibility with various substances
Highly reactive with reducing agents, combustible materials, organic materials, acids.

Corrosivity
No specific information is available in our database regarding the corrosivity of this product in presence of various materials.

Special Remarks on Reactivity
Hazardous Decomposition Products: Chlorine, hydrogen chloride, nitrogen trichloride.

Special Remarks on Corrosivity
No additional remark.

Hazardous Polymerization No.

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**Section 11: Toxicological Information**

**Routes of Entry**
Absorbed through skin. Eye contact. Inhalation. Ingestion.

**Toxicity to Animals**
Acute oral toxicity (LD50): 620 mg/kg [Rat].
Acute dermal toxicity (LD50): 11000 mg/kg [Rabbit].

**Chronic Effects on Humans**
CARCINOGENIC EFFECTS: N/A
MUTAGENIC EFFECTS: N/A
TERATOGENIC EFFECTS: N/A
DEVELOPMENTAL TOXICITY: N/A
Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage. Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

**Other Toxic Effects on Humans**
Extremely hazardous in case of ingestion. Very hazardous in case of skin contact (corrosive, irritant), of eye contact (irritant), of inhalation. The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Prolonged exposure may result in skin burns and ulcerations. Over-exposure by inhalation may cause respiratory irritation. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

**Special Remarks On Toxicity to Animals**
No additional remark.

**Special Remarks On Chronic Effects on Humans**
No additional remark.

**Special Remarks on Other Toxic Effects on Humans**
No additional remark.

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**Section 12: Ecological Information**

**Ecotoxicity** N/A
**BOD5 and COD** N/A

**Products of Biodegradation** Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of Products the of Biodegradation**
The products of degradation are less toxic than the product itself.

**Special Remarks on the Products of Biodegradation** No additional remark.

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**Section 13: Disposal Considerations**
Waste Disposal
Recycle, if possible. Consult your local or regional authorities.

Section 14: Transport Information

TDG Classification  TDG CLASS 5.1: Oxidizing substance.
Shipping name  Dichloro isocyanuric acid salts
PIN  UN2465
Packing  Group II
Special Provisions for Transport  No additional remark.

Section 15: Other Regulatory Information


Section 16: Other Information

DISCLAIMER
For R&D use only. Not for drug, household or other uses.

MSDS Creation Date: 6/16/2000
Revision #4 Date: 3/15/2007

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