



**Section 1 – Identification of the substance/preparation and the company**

**Product Name:** Circomate  
**Company:** Donaghys Ltd  
**Address:** 16 Sheffield Crescent  
PO Box 20 449  
Christchurch  
**Telephone Number:** 0800 942 006  
**Manufacturer Product Code:** ACMXXXX  
**Recommended Use:** Chlorinated alkaline detergent powder.

**Section 2 – Hazard Identification**

**Hazard Classes:** 6.1D Harmful if swallowed  
8.2B Causes serious skin burns  
8.3A Causes severe eye damage



**EPA NZ Approval Code:** HSR002526 Cleaning Products (Corrosive) Group Standard

**Section 3 – Composition Information**

Chemical Entity	CAS No.	Content [%]
Sodium hydroxide	1310-73-2	30-60%
Sodium dichloroisocyanurate	2839-78-9	1-10%

**Section 4 – First Aid Measures**

**If Swallowed:** NEVER give anything by mouth to an unconscious person. Rinse mouth and give water or milk to drink. Immediately call a POISON CENTRE or doctor/physician.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so, continue rinsing. Immediately call a POISON CENTRE or doctor / physician.

**If on skin:** Wash with plenty of soap and water. Wash contaminated clothing before re-use. Immediately call a POISON CENTRE or doctor/physician

**If inhaled:** If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms, immediately call a POISON CENTRE or doctor / physician.

**Advice to Doctor:** Treat symptomatically.

**POISON CENTRE CONTACT: 0800 764 766 (National Poisons Information Centre)**



### Section 5 – Fire-fighting Measures

<b>Flashpoint:</b>	Not applicable
<b>Combustion</b>	Decomposes on heating and may produce toxic fumes of chlorine
<b>Products:</b>	caustic compounds
<b>Flammability Limits:</b>	Not applicable
<b>Protective Equipment:</b>	Breathing apparatus, face shield or protective goggles, and neoprene rubber gloves and boots
<b>Extinguishing Media:</b>	Based on surrounding materials
<b>Special Fire Fighting Methods:</b>	None

### Section 6 – Accidental Release Measures

**Spills and Disposal: MAJOR SPILLS**

DO NOT touch the spill material. Slippery when spilt.  
Keep dry. Reacts violently with water.  
Clear area of personnel and move upwind.  
Alert Fire Brigade and tell them location and nature of hazard.  
1: Wear full body protective clothing with breathing apparatus.  
2: Prevent, by any means available, spillage from entering drains or watercourses.  
Shut off all possible sources of ignition and increase ventilation.  
Stop leak if safe to do so.  
Use dry clean up procedures and avoid generating dust.  
Collect recoverable product into labelled containers for recycling.  
Collect residues and seal in labelled drums for disposal.  
Wash area down with large quantity of water and prevent runoff into drains.  
If contamination of drains or waterways occurs, advise emergency services.  
After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using..

**Minor Spills:**

DO NOT touch the spill material. Slippery when spilt.  
Clean up all spills immediately.  
Control personal contact by using protective equipment.  
Use dry clean up procedures and avoid generating dust.  
Place in suitable containers for disposal.

**Disposal**

- 1: Recycle wherever possible or consult manufacturer for recycling options.
- 2: Consult State Land Waste Management Authority for disposal.
- 3: Treat and neutralise with dilute acid at an effluent treatment plant.
- 4: Recycle containers, otherwise dispose of in an authorised landfill.



#### WASTE DISPOSAL PROCEDURES

"Wear eye protection, protective clothing and nitrile rubber gloves to control personal contact from sodium hydroxide. " Add the compound to a large volume of ice water. Neutralise by adding 5% hydrochloric acid and empty into the drain [Armour 1996].

#### SPILLAGE DISPOSAL

"Wear eye protection, protective clothing and nitrile rubber gloves to control personal contact from sodium hydroxide. Scoop the contents into a container and add small portions into a large volume of ice water." Neutralise with 5% hydrochloric acid and empty into the drain. Wash the area of the spill with water [Armour 1996].

**Protective Equipment:** Wear neoprene gloves and boots, overalls and face/eye protection  
**Environmental Precautions:** Avoid entry into waterways or streams. Prevent washings from entering waterways.

### **Section 7– Handling and Storage**

**Storage:**

#### **SUITABLE CONTAINER**

Plastic bag

NOTE: Bags should be stacked, blocked, interlocked, and limited in height so that they are stable and secure against sliding or collapse or Packaging as recommended by manufacturer.

Glass container. Polyethylene or polypropylene container or Polylined drum.

DO NOT use aluminium, galvanised or tin-plated containers. Check that containers are clearly labelled.

#### **STORAGE INCOMPATIBILITY**

Keep dry. Reacts violently with water.

Segregate from water, strong oxidisers, strong acids, organic materials, ammonium compounds, nitro compounds and trichlorethylene.

#### **STORAGE REQUIREMENTS**

Keep dry. Reacts violently with water.

- 1: Store in original containers.
- 2: Keep containers securely sealed.
- 3: Store in a cool, dry, well-ventilated area.
- 4: Store away from incompatible materials and foodstuff containers.
- 5: Protect containers against physical damage and check regularly for leaks.
- 6: Observe manufacturer's storing and handling recommendations. DO NOT use aluminium, galvanised or tin-plated containers.

**Handling:**

Do not handle until all safety instructions have been read and understood.

Wear eye / face protection.

In case of inadequate ventilation wear respiratory protection.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment.



### Section 8 – Exposure Controls/Personal Protection

These precautions are suggested for conditions where the potential for exposure to the product exists. Emergency conditions may require additional precautions.

<b>Exposure Limits:</b>	TLV C: 2 mg/m <sup>3</sup> ES Peak: 2 mg/m <sup>3</sup> OES STEL: 2 mg/m <sup>3</sup> IDLH Level: 10 mg/m <sup>3</sup> The TLV-C is recommended based on concentrations that produce noticeable but not excessive, ocular and upper respiratory tract irritation.
<b>Protective Equipment:</b>	Observe good work place practices and avoid contact with skin and eyes. Wear overalls, safety glasses and rubber/PVC gloves when handling. Wear eye / face protection. In case of inadequate ventilation wear respiratory protection.
<b>Hygiene Precautions:</b>	Do not eat, drink or smoke when using this product.
<b>Engineering Controls:</b>	Use in a well-ventilated area. DO NOT handle directly. Wear gloves and use scoop / tongs / tools. If risk of overexposure exists, wear SAA approved respirator. If conditions where worker exposure potential is high, wear full-face air-supplied breathing apparatus and full protective suit.

### Section 9 – Physical and Chemical Properties

<b>Appearance:</b>	White powder
<b>Odour:</b>	Chlorine odour
<b>Specific Gravity:</b>	N/A
<b>pH:</b>	N/A
<b>Vapour Pressure:</b>	N/A
<b>Flash Point:</b>	N/A
<b>Autoignition Temperature:</b>	N/A
<b>Flammability Limits:</b>	N/A
<b>Solubility:</b>	10 g/L

### Section 10 – Stability and Reactivity

<b>Stability:</b>	Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
<b>Conditions to Avoid:</b>	None
<b>Materials to Avoid:</b>	Acidic compounds, water
<b>Hazardous Decomposition Products:</b>	None



## Section 11 – Toxicological Information

**No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label.**

**Ingestion:** The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion.

**Inhalation:** Generated dust may be highly discomforting and corrosive to the upper respiratory tract if inhaled and is capable of causing severe burns to the upper respiratory tract. Inhalation of alkaline corrosives may produce irritation of the respiratory tract with coughing, choking, pain and mucous membrane damage. Pulmonary oedema may develop in more severe cases; this may be immediate or in most cases following a latent period of 5-72 hours. Symptoms may include tightness in the chest, dyspnea, frothy sputum, cyanosis and dizziness. Findings may include hypotension, a weak and rapid pulse and moist rales. The material may produce respiratory tract irritation which produces an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system. Unlike most organs the lung can respond to a chemical insult or agent by first trying to remove or neutralise the irritant and then repairing the damage. The repair process, which initially developed to protect mammalian lungs from foreign matter and antigens, may however, cause further damage the lungs when activated by hazardous chemicals. The result is often the impairment of gas exchange, the primary function of the lungs. Severe acute dust inhalation exposure may be fatal due to spasm, inflammation and oedema of the larynx and bronchi, chemical pneumonitis and severe pulmonary oedema. Symptoms of overexposure include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.

**Dermal:** The material can produce chemical burns following direct contact with the skin. 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. The material may cause 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.

**Ocular:** The material can produce chemical burns to the eye following direct contact. Dust or mists may be extremely irritating. The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

**Chronic Effects:** 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. Substance



accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a nonallergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnea, cough and mucous production.

### Section 12 - Ecological Information

<b>EPA Classification:</b>	Not hazardous to the environment
<b>Ecotoxicity:</b>	Not hazardous to the environment
<b>Bioaccumulation:</b>	Not known to bioaccumulate

### Section 13 – Disposal Considerations

<b>Product Disposal:</b>	If possible dispose of by using according to the label, otherwise dispose of in an approved landfill or bury below 50 cm in a disposal pit specifically marked and set up for this purpose clear of waterways
<b>Container Disposal:</b>	Triple rinse container and add residue to feed system. If circumstances, especially wind direction, permit the empty containers may be burned, otherwise crush and bury in a suitable landfill.



#### Section 14 – Transport Information

**Proper Shipping name:** CORROSIVE SOLID N.O.S  
**UN Number:** 1759  
**DG Class:** 8  
**Subsidiary Risk Class:** None  
**Packing Group:** II  
**HAZCHEM Code:** 2R

#### Section 15 – Regulatory Information

**EPA NZ Approval Number:** HSR002526  
See <http://www.epa.govt.nz> for approval conditions  
**NZFSA Registration Number:** H1031

#### Section 16 – Other Information

The information in this MSDS is provided in good faith, but no warranty, expressed or implied is made. Contact Donaghys Ltd for more information.

**EMERGENCY CONTACT No.: 0800 764 766 (National Poisons Information Centre)**