



## PHYSICAL DESCRIPTION / PROPERTIES



### APPEARANCE

White hygroscopic odourless powder / granular mildly alkaline solid: mixes with water. Soluble in glycerol and slightly soluble in alcohol. Bitter alkaline taste. On exposure to air, will gradually absorb one mole of water. Typical bulk density 60-65 lbs/cft.

Boiling Point	400 decomposes
Melting Point	851
Vapour Pressure (kPa)	Not applicable
Specific Gravity	2.53 @ 20 C
Flash Point (deg C)	Not applicable
Lower Explosive Limit (%)	Not applicable
Upper Explosive Limit (%)	Not applicable
Solubility in Water (g/L)	Miscible

### INGREDIENTS

NAME	CAS RN	%
Sodium Carbonate	497-19-8	> 99

## HEALTH HAZARD



### ACUTE HEALTH EFFECTS

#### **SWALLOWED**

Considered an unlikely route of entry in commercial/industrial environments The material is moderately discomforting to the gastro-intestinal tract and may be harmful if swallowed in large quantity. Ingestion may result in nausea, abdominal irritation, pain and vomiting. The fatal dose for a adult human is reported to be approximately 30 grams.

#### **EYE**

Generated dust may be highly discomforting to the eyes and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

#### **SKIN**

The material is moderately discomforting to the skin if contact is prolonged and is capable of causing skin reactions which may lead to dermatitis. The material may accentuate any pre-existing dermatitis condition. The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to vesiculation, scaling and thickening of the epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.

#### **INHALED**

Not normally a hazard due to non-volatile nature of product Generated dust may be highly discomforting to the upper respiratory tract if inhaled. Symptoms of inhalation may include coughing, sore throat, and laboured breathing. A severe or continued inhalation exposure may cause pulmonary oedema (lung damage).

## **CHRONIC HEALTH EFFECTS**

Principal routes of exposure are usually by skin contact / eye contact with the material and inhalation of generated dust. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. Contact with concentrated solutions may cause tissue damage "soda ulcers" Chronic inhalation exposure may result in nasal ulceration and/or perforation of nasal septum. As with any chemical product, contact with unprotected bare skin; inhalation of vapour, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice.

## **FIRST AID**

### **SWALLOWED**

Rinse mouth out with plenty of water.

If poisoning occurs, contact a doctor or Poisons Information Centre.

In Australia phone 13 1126; New Zealand 03 4747000.

If swallowed, do NOT induce vomiting. Give a glass of water.

### **EYE**

If this product comes in contact with the eyes:

- 1: Immediately hold the eyes open and wash continuously for at least 15 minutes with fresh running water.
- 2: 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.
- 3: Transport to hospital or doctor without delay.
- 4: Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

### **SKIN**

If product comes in contact with the skin:

- 1: Immediately remove all contaminated clothing, including footwear (after rinsing with water).
- 2: Wash affected areas thoroughly with water (and soap if available).
- 3: Seek medical attention in event of irritation.

### **INHALED**

1: If dust is inhaled, remove to fresh air.

2: Encourage patient to blow nose to ensure clear breathing passages.

3: Ask patient to rinse mouth with water but to not drink water.

4: Seek immediate medical attention.

### **ADVISE TO THE DOCTOR**

Treat symptomatically.

## **PRECAUTIONS FOR USE**



## **EXPOSURE STANDARDS**

No exposure limits set by NOHSC or ACGIH

Dusts not otherwise classified, as inspirable dust;

ES TWA: 10 mg/m<sup>3</sup>.

OEL STEL: (Russia) 5 mg/m<sup>3</sup>

## **ENGINEERING CONTROLS**

Use in a well-ventilated area or Local exhaust ventilation may be required for safe working, i.e. to keep exposures below required standards, otherwise PPE is required. None required when handling small quantities.

OTHERWISE:

- 1: Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.
- 2: Exhaust ventilation should be designed to prevent accumulation and recirculation of particulates in the workplace.
- 3: If in spite of local exhaust an adverse concentration of the substance in air could occur, respiratory protection should be considered.  
Such protection might consist of:
  - (a): particle dust respirators, if necessary, combined with an absorption cartridge;
  - (b): filter respirators with absorption cartridge or canister of the right type;
  - (c): fresh-air hoods or masks
- 3: Build-up of electrostatic charge on the dust particle, may be prevented by bonding and grounding.
- 4: Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting.

## **PERSONAL PROTECTION**

### **EYES**

Safety glasses with side shields; or as required, Chemical goggles.  
Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

### **HANDS / FEET**

Barrier cream with polyethylene gloves Rubber gloves.  
Neoprene gloves.  
PVC gloves.

### **OTHER**

Overalls Eyewash unit.

### **RESPIRATOR**

Protection Factor	Half Face Respirator	Full Face Respirator	Powered Air Respirator
10 x ES	P1 Air-line*	-	PAPR-P1
50 x ES	Air-line**	-	-
100 x ES	-	P2	PAPR-P2
100+ x ES	-	P3	-
		Air-line**	PAPR-P3

\* - Negative pressure demand

\*\* - Continuous flow.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information, consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

## **SAFE HANDLING**



### **STORAGE AND TRANSPORT**

#### **SUITABLE CONTAINER**

Multi ply paper bag with sealed plastic liner or heavy gauge plastic bag

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

Check that all containers are clearly labelled and free from leaks

Packing as recommended by manufacturer.

#### **STORAGE INCOMPATIBILITY**

Keep dry Segregate from acids.

DO NOT use aluminium or galvanised containers.

#### **STORAGE REQUIREMENTS**

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.

#### **TRANSPORTATION**

No restrictions.

### **SPILLS AND DISPOSAL**

#### **MINOR SPILLS**

Clean up all spills immediately. Avoid contact with skin and eyes.

Use dry clean up procedures and avoid generating dust.

If product enters drains, waterways or watercourses, flush at least ten (10) times the volume of water to the drain.

Place spilled material in clean, dry, sealable, labelled container.

#### **MAJOR SPILLS**

Clear area of personnel.

Wear protective clothing, impervious gloves and safety glasses.

Prevent, by any means available, spillage from entering drains or water courses.

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 spill area with large quantities of water.

#### **DISPOSAL**

1: Recycle wherever possible or consult manufacturer for recycling options.

2: Consult State Land Waste Management Authority for disposal.

3: Bury residue in an authorised landfill.

4: Recycle containers if possible, or dispose of in an authorised landfill.

#### **FIRE/EXPLOSION HAZARD**

Used as a component of dry powder chemical fire extinguishers

Non combustible Decomposes on heating and produces toxic fumes of carbon dioxide (CO<sub>2</sub>).

## CONTACT POINT



In the event of a chemical event of a chemical incident phone **0800 243 622** for immediate assistance.

### **AUSTRALIAN POISONS INFORMATION CENTRE**

24 HOUR SERVICE: 13 11 26  
POLICE, FIRE BRIGADE OR AMBULANCE: 000

### **NEW ZEALAND POISONS INFORMATION CENTRE**

24 HOUR SERVICE: 0800 POISON or +643 353 0199  
NZ EMERGENCY SERVICES: 111

End of Report

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