

Section 1: Identification of the Material and Supplier

Product Name: Breakwash

Other Names: Sodium metasilicate mixture.

Proper shipping name (ADG Code): Disodium trioxosilicate mixture.

Recommended use: As a heavy duty alkaline detergent for pre-soaking.
Use as directed on the product label.

Supplier: Bracton Industries (NSW) Pty. Ltd.,
ACN: 003 060 160
50 Chard Road, BROOKVALE NSW 2100, Australia
Tel: +61 2 9938 1800 (business hours)
Fax: +61 2 9905 0979

Emergency Phone Numbers:

Transport/Fire Emergency: **000** (Emergency services)

Medical Emergency: **131126** (Poisons Information Centre)

Section 2: Hazards Identification

Hazardous according to criteria of Worksafe Australia.

Dangerous Goods.

Risk Phrases: R: 34 Causes burns.
R: 37 Irritating to respiratory system.

Safety Phrases: S: 13 Keep away from food, drink and animal foodstuffs.
S: 24/25 Avoid contact with skin and eyes.
S: 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S: 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible).

Section 3: Composition/Information on Ingredients

Ingredients:

Sodium metasilicate pentahydrate	[10213-79-3]	30 - 60 %
Other inorganic salts		> 60 %
Surfactant		< 10 %
Water	[7732-18-5]	to 100 %

Section 4: First Aid Measures

For advice, contact a Poisons Information Centre (Phone 131126) or a doctor.

Swallowed: If swallowed, do NOT induce vomiting.

Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Wash clothing thoroughly before re-use.

Eyes: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Inhaled: Remove from exposure.

First Aid facilities:

Recommended: Eye wash. Hand wash basin.

Advice to Doctor:

Product contains a high proportion of alkaline salts, including sodium metasilicate. Corrosive. Risk of serious damage to eyes. Contact Poisons Information Centre.

Aggravated medical conditions:

None found.

Section 5: Fire Fighting Measures

HAZCHEM Code: 2 X

Evacuate: No.

Extinguishant: Water fog or fine water spray.

Risk of violent reaction or explosion: No.

Products of combustion: Oxides of carbon, oxides of sulphur, water vapour.

Protective Equipment: Full protective clothing including breathing apparatus and protective gloves.

Section 6: Accidental Release Measures

Emergency Procedures:

Contain. Prevent spillages from entering natural waters.

For large spills:

Contain spillage using sand or earth. Transfer liquid and solids to suitable container. Treat residues as for small spillage.

For small spills:

If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water. Otherwise, absorb on inert absorbent, transfer to suitable container and arrange removal by disposals company. Wash site of spillage thoroughly with water and detergent.

Section 7: Handling and Storage

Precautions for safe handling:

Avoid contact with skin and eyes. Keep away from acids.

Conditions for safe storage:

Store in a cool, dry well ventilated place, out of reach of children. Store in original container. Keep container tightly closed and dry. Keep away from acids. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

Incompatibles:

Acids, aluminium, tin, zinc, oxidising agents.

Section 8: Exposure Controls/Personal Protection

National Exposure Standards:

ES-TWA: None assigned.

ES-STEL: None assigned.

ES-PEAK: None.

Notations: None.

Biological Limit Values: No data found.

Engineering Controls:

Ensure adequate ventilation (same as outdoors) when using. If handling industrial quantities or if dust risk exists, consider local mechanical exhaust/extraction to keep airborne contamination as low as possible.

Personal Protective Equipment:

Avoid contact with skin and eyes. Avoid breathing dust. Personal protection to be selected from those recommended below, as appropriate to mode of use, quantity handled and degree of hazard:-

Normal Use:

Eye/face protection
Gloves, rubber or plastic.

Industrial Quantities:

Face shield or safety glasses
Gloves, rubber or plastic
Plastic apron, sleeves and boots
Impervious overalls.

Section 9: Physical and Chemical Properties

Appearance: White, slightly sticky, granular powder.
Odour: Slight smell of detergent.
pH: > 11.5
Vapour Pressure: No data.
Vapour Density: No data.
Boiling Point: No data.
Melting Point: No data.
Volatiles: About 4 %
Volatile Organic Compounds (VOC): Nil.
Evaporation Rate: No data.
Solubilities: Soluble in water.
Specific Gravity/Density: No data.
Flash Point: None.
Flammable Limits: None.
Dust Explosion: Will not occur.
Auto-ignition Temperature: No data.

Other Information:

Hygroscopic, will absorb moisture from the air. Alkaline mixture, may react vigorously or violently with acids, generating carbon dioxide, a simple asphyxiant. May react with strong oxidising agents.

In the presence of moisture, may react with aluminium, tin, zinc or galvanised iron, generating hydrogen, a flammable gas. Slippery when spilled, especially when wet.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Incompatible materials, moisture.

Incompatible Materials: Acids, oxidising agents, aluminium, tin, zinc.

Hazardous Decomposition Products: Oxides of carbon, oxides of sulphur.

Hazardous Reactions: May react violently with strong mineral acids.

Section 11: Toxicological Information

Health Effects: No data available for the mixture. Information presented relates to individual ingredients.

Acute:

Swallowed: Corrosive. May cause burns to the mouth, throat and gastrointestinal system. Likely to cause gastric upset, with discomfort or pain, nausea, vomiting and diarrhoea. May cause ulceration and/or bleeding from the stomach and intestines, possible shock and collapse.

Skin: Corrosive. May cause irritation and possible skin burns, particularly when wet. Will have a degreasing effect on the skin.

Eyes: Corrosive. Risk of serious damage to eyes. May cause severe irritation and possible burns and permanent injury.

Inhaled: Inhaled dust is irritating to the respiratory system. May cause a burning pain in the nose and throat, coughing, wheezing and shortness of breath. Risk of delayed onset pulmonary oedema (fluid build-up in the lungs).

Chronic: Repeated skin contact may lead to irritation, burns and dermatitic effects. Inhalation over-exposure may lead to bronchitis.

LD50: Inorganic salt #1 4,090 mg/kg oral, rat.
6,600 mg/kg oral, mouse.
Sodium metasilicate 1,153 mg/kg oral, rat.
770 mg/kg oral, mouse.
LC50: Inorganic salt #1 2,300 mg/m³/2 hours, rat.
LDLo: Sodium metasilicate 250 mg/kg oral, dog.

Section 12: Ecological Information

Ecotoxicity: May be harmful to aquatic organisms.
Persistence and degradability: The surfactant used in this product is considered to be readily biodegradable.
Mobility: Readily transported by water.
Environmental Fate: No data.
Bioaccumulative potential: No data.
Other adverse environmental effects: No data.

Section 13: Disposal Considerations

The generator of any wastes from this product is responsible for its proper classification, transport and disposal.

Consult appropriate local and State regulations.

Disposal methods and containers:

Avoid disposal to natural waters or the environment.

Special precautions for landfill or incineration:

Unsuitable for incineration.

May not be suitable for some landfill sites.

Section 14: Transport Information

UN Number: UN 3253
UN Proper shipping name: Disodium trioxosilicate mixture.
Class and subsidiary risk: 8 Corrosive (alkaline).
Packaging group: III
Special precautions for user: Keep away from acids.
Do not store or transport in containers lined with aluminium, tin, zinc or galvanised iron.
Segregate from classes 1, 4.3, 5.1, 5.2, 7, 8 (acids), foodstuff and foodstuff empties.
Protect from moisture.
HAZCHEM Code: 2 X
Material for export: Refer to IMO/IMDG and IATA/ICAO.

Section 15: Regulatory Information

Poisons (SUSDP): Schedule 5 Alkaline salts, with pH > 11.5.
Dangerous Goods: Yes. UN 3253. Class 8. Pk.Grp. III
Carcinogen: Australia IARC NTP
No. No. No.
Agricultural and Veterinary Chemicals Act: Not applicable.
Australian Inventory of Chemical Substances (AICS): Listed.
Other National/International Regulations: No data.

Section 16: Other information

Date of MSDS update: June 2005
Complete review and re-write of all sections.