Section 1: Identification of the Material and Supplier

Product Name: **Wash Mate**

Other Names: Mixture of sodium hydroxide, alkaline salts and surfactant.

Proper shipping name (ADG Code): Corrosive solid, basic, inorganic, n.o.s. (sodium hydroxide, disodium trioxosilicate)

Recommended use: In automatic washing processes.
Use as directed on the product label.

Supplier: **Hunters Products (TAS) Pty. Ltd.,**
A.C.N. 004 601 263

HEAD OFFICE	**HOBART OFFICE**	**BURNIE OFFICE**
60 Gleadow Street,	105 Albert Road,	22 Pearl Street,
INVERMAY TAS 7248	MOONAH TAS 7009	WIVENHOE TAS 7320
Tel: 03 6331 4755	Tel: 03 6228 7955	Tel: 03 6431 9627
Fax: 03 6334 1065	Fax: 03 6228 7988	Fax: 03 6432 2083

Emergency Phone Numbers:

Transport/Fire Emergency:	**000**	(Emergency services)
Medical Emergency:	**131126**	(Poisons Information Centre)

Section 2: Hazards Identification

Classified as hazardous according to criteria of Worksafe Australia.

Dangerous goods.

Risk Phrases:	R: 35	Causes severe burns.
	R: 37	Irritating to respiratory system.
Safety Phrases:	S: 1/2	Keep locked up and out of the reach of children.
	S: 13	Keep away from food, drink and animal feeding substances.
	S: 22	Do not breathe dust.
	S: 24/25	Avoid contact with skin and eyes.
	S: 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	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 where possible).

Section 3: Composition/Information on Ingredients

Ingredients:

Sodium carbonate anhydrous	[497-19-8]	30 - 60 %
Sodium metasilicate pentahydrate	[10213-79-3]	10 - 30 %
Sodium hydroxide	[1310-73-2]	10 - 30 %
Surfactant		< 10 %
Other ingredients deemed not to be hazardous		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.

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, rest and keep warm. Seek medical advice.

First Aid facilities:

Mandatory: Eye wash. Hand wash basin.

Recommended: Emergency shower if handling industrial quantities.

Advice to Doctor:

Product is a highly alkaline mixture containing sodium hydroxide and sodium metasilicate, with a low proportion of a surfactant. Corrosive, causes burns. Risk of serious eye damage. If swallowed, may cause holes in the stomach and intestines; gastric lavage may be inadvisable. Possible risk of aspiration of froth into the lungs during vomiting. Contact Poisons Information Centre.

Aggravated medical conditions:

No specific data 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, oxides of phosphorus.

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

Section 6: Accidental Release Measures

Emergency Procedures:
Contain.

For large spills:
Contain spillages with sand or earth. Transfer both liquid and solids to suitable container(s). Treat residues as for small spills.

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 and transfer to suitable container. Wash site of spillage thoroughly with water and detergent. Ventilate area to dispel any residual vapours.

Section 7: Handling and Storage

Precautions for safe handling:
Avoid contact with skin and eyes.
Avoid breathing dusts.
Keep away from acids, active metals.

Conditions for safe storage:
Store in a cool, dry, well ventilated place, out of reach of children. Large quantities should be stored in a dangerous goods store. Store in original container. Keep container tightly closed and out of direct sunlight. Keep away from acids, oxidising agents, active metals. Protect from physical damage. Clean up all spills promptly; avoid secondary accidents.

Incompatibles:
Acids, oxidising agents, active metals (such as aluminium, tin and zinc), ammonium compounds, nitro compounds, organic halides, wood and paper products.

Section 8: Exposure Controls/Personal Protection

National Exposure Standards:

ES-TWA: Sodium hydroxide 2 mg/m³

ES-STEL: None assigned.

ES-PEAK: Sodium hydroxide 2 mg/m³

Notations: None.

[Peak] indicates a ceiling concentration which should not be exceeded, even momentarily.

Biological Limit Values: No data found.

Engineering Controls:

Do not use aluminium, tin, zinc, galvanised iron, wood or wood products as materials of construction.
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 and at least below the TLV.

Personal Protective Equipment:

Avoid contact with skin and eyes. Avoid breathing dusts.
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:

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

Section 9: Physical and Chemical Properties

Appearance:	White, granular powder.
Odour:	Almost odourless.
pH:	About 14 Very alkaline.
Vapour Pressure:	None.
Vapour Density:	Not applicable.
Boiling Point:	No data.
Melting Point:	No data.
Volatiles:	Nil.
Volatile Organic Compounds (VOC):	Nil.
Evaporation Rate:	Not applicable.
Solubilities:	Soluble in water, generating heat.
Specific Gravity/Density:	No data.
Flash Point:	None.
Flammable Limits:	None.
Dust Explosion:	Will not happen.

Auto-ignition Temperature: No data.

Other Information:
Hygroscopic, will absorb moisture from the air. May absorb carbon dioxide from the air. Highly alkaline, will react vigorously or violently with mineral acids, generating carbon dioxide, a simple asphyxiant. Contact with active metals, especially in the presence of moisture, may generate hydrogen, a flammable gas. May react with ammonium compounds, generating ammonia, a toxic gas. Will attack paper, wood and other wood products. May form shock-sensitive products with nitro compounds. May attack glass on prolonged contact. Spillages will be slippery when wet.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Incompatible materials.

Incompatible Materials: Acids, acid salts, ammonium compounds, nitro compounds, active metals (such as aluminium, tin, zinc) oxidising agents, organic halides, wood and wood products.

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

Hazardous Reactions: Will react vigorously or violently with strong mineral acids, generating carbon dioxide.
Corrosive to active metals in the presence of moisture, generating hydrogen gas.
May form shock-sensitive products with nitro compounds.
Contact with ammonium compounds may generate ammonia.

Section 11: Toxicological Information

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

Acute:

Swallowed: Corrosive to living tissues. May cause burns to mouth, throat and epigastrium. Large doses may lead to perforation of the stomach and intestines. May cause nausea, vomiting, abdominal pains, diarrhoea (occasionally bloody), fall in blood pressure, heart failure, coma and death. Damage may not be immediately apparent until days later, but may still prove fatal.

Skin: Corrosive, may cause severe, deep burns. Dusts may cause small burns. Symptoms may include redness, pain, burns and deep ulceration.

Eyes: Corrosive to eyes. Contact with the eyes rapidly causes redness, pain, blurred vision and may result in severe deep burns and permanently impaired vision.

Inhaled: Inhalation of dust may cause damage to the upper respiratory tract and the lungs. Symptoms may range from mild irritation of the mucous membranes to severe pneumonitis (inflammation and damage to lung tissue), and can include cough, a burning sensation, laboured breathing, sneezing, sore throat and runny nose.
Inhalation of dusts may cause pulmonary oedema (fluid build-up in the lungs). Onset of symptoms may be delayed.

Chronic: Repeated skin exposure may lead to burns and ulceration. Chronic exposure to dusts (and solution aerosols) may cause nose bleeds, nasal congestion, erosion of the teeth, perforation of the nasal septum, chest pain and bronchitis.

LD_{50}:	Sodium carbonate anhydrous	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.
	Sodium hydroxide	No data found.
LC_{50}:	Sodium carbonate anhydrous	2,300 mg/m³/2 hours, rat.
LDLo:	Sodium hydroxide	500 mg/kg oral, rabbit.

Section 12: Ecological Information

Ecotoxicity: Alkaline mixture.
Harmful to aquatic organisms.

Persistence and degradability: The surfactant used in this product is regarded as readily biodegradable.

Mobility: Readily transported by water.

Environmental Fate: No data.

Bioaccumulative potential: No data.

Other adverse environmental effects: Contains a surfactant. Local concentrations may be harmful to aquatic organisms, including fish.
Contains a moderate proportion of phosphate. May contribute to the development of algal blooms in natural waters.

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.
Avoid using metal containers.

Special precautions for landfill or incineration:
Unsuitable for incineration.

Section 14: Transport Information

UN Number:	UN 3262
UN Proper shipping name:	Corrosive solid, basic, inorganic, n.o.s. (sodium hydroxide, disodium trioxosilicate)
Class and subsidiary risk:	8 Corrosive.
Packaging group:	II
Special precautions for user:	Do not store or transport with dangerous goods of classes 1, 4.3, 5.1, 5.2, 7, 8 (acidic), foodstuff and foodstuff empties. Contain spillages.
HAZCHEM Code:	2 X
Material for export:	Regulated. Refer to **IMO/IMDG** and **IATA/ICAO**.

Section 15: Regulatory Information

Poisons (SUSDP): Schedule 6
Sodium hydroxide > 5 %

Dangerous Goods:	Yes.	UN 3262	8/II	2 X.

Carcinogen:	**Australia**	**IARC**	**NTP**	**RTECS**
	No.	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: May 2007
Complete review and re-write of all sections.

Abbreviations:
NOHSC - National Occupational Health and Safety Commission.
ACGIH - American Conference of Governmental Industrial Hygienists.
MAK - Maximum workplace concentration - Germany, (*maximale Arbeitsplatzkonzentration*)
IARC - International Agency for Research on Cancer (France).
NPT - National Toxicology Program (USA).
RTECS - Registry of Toxic Effects of Chemical Substances.

Literature references:

Other Available Sources of Data:
National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [2011(2003)] - NOHSC.
Australian Dangerous Goods Code.
Standard for the Uniform Scheduling of Drugs and Poisons - AHMAC.
Exposure Standards for Atmospheric Contaminants in the Occupational Environment [1003]- NOHSC.
List of Designated Hazardous Substances [10005] - NOHSC.
Merck Index - Merck Inc.
Sax's Dangerous Properties of Industrial Materials - Lewis.
Handbook of Toxic and Hazardous Chemicals and Carcinogens - Sittig.
Handbook of Reactive Chemical Hazards - Bretherick.
Hawley's Condensed Chemical Dictionary - Wiley Interscience.
AUSREG's Chemical Data Package for PCs - AUSREG Consultancy.