



Section 1: Identification of the Material and Supplier

Product Name: Tatura Alkali

Other Names: Mixture of inorganic salts and surfactants.

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

Recommended use: As an alkaline detergent powder.
Use as directed on the product label.

Supplier: DASCO Pty. Ltd.,
ABN: 14 004 581 113
24 - 26 Helen Street, HEIDELBERG HEIGHTS VIC 3081
Tel: (03) 9459 7004 (business hours)
Fax: (03) 9459 9200

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: 34 Causes burns.
R: 37 Irritating to the 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 stuffs.
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 where possible).

Section 3: Composition/Information on Ingredients

Ingredients:

Sodium carbonate anhydrous	[497-19-8]	> 60 %
Sodium metasilicate pentahydrate	[10213-79-3]	10 - 30 %
Mixed surfactants		< 10 %
Other ingredients deemed not to be hazardous		< 10 %

Section 4: First Aid Measures

For advice, contact a Poisons Information Centre (Phone 131 126) 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 Center or a doctor, or for at least 15 minutes.

Inhaled: Remove from exposure. Seek medical advice.

First Aid facilities:

Recommended: Eye wash. Hand wash basin.

Advice to Doctor:

Product is a mixture of alkaline salts and mixed surfactants, containing a moderate proportion of sodium metasilicate. Causes burns. Risk of serious eye damage. A possible aspiration risk if swallowed. Contact Poisons Information Centre.

Aggravated medical conditions:

No 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: Carbon dioxide, oxides of sulphur.

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

Section 6: Accidental Release Measures

Emergency Procedures:

Contain.

For large spills:

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

For small spills:

Avoid generating dust.

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

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, 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, dry and out of direct sunlight. Keep away from acids. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

Incompatibles:

Acids, active metals in the presence of moisture.

Section 8: Exposure Controls/Personal Protection

National Exposure Standards:

ES-TWA: None assigned, but see:
Nuisance dusts 10 mg/m³

ES-STEL: None assigned.

ES-PEAK: None assigned.

Notations: None.

Biological Limit Values: No data found.

Engineering Controls:

Avoid using aluminium, tin, zinc or galvanised iron as materials of construction.
Ensure adequate ventilation (same as outdoors) when using.
If handling industrial quantities, or if dust/aerosol 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/aerosols.
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, slightly sticky, granular powder.
Odour: Mild smell of detergents.
pH: From about 11.5 Alkaline.
Vapour Pressure: No data.
Vapour Density: No data.
Boiling Point: No data.
Melting Point: No data.
Volatiles: < 1 %
Volatile Organic Compounds (VOC): Nil.
Evaporation Rate: No data.
Solubilities: Soluble in water with generation of heat.
Specific Gravity/Density: No data.
Flash Point: None.
Flammable Limits: None.
Dust Explosion: Will not happen.
Auto-ignition Temperature: No data.

Other Information:

Highly alkaline mixture. May react vigorously or violently with acids, generating carbon dioxide, a simple asphyxiant. Slightly hygroscopic, may absorb moisture from the air. In the presence of moisture may be corrosive to active metals, such as aluminium, tin, zinc and galvanised iron, generating hydrogen, a flammable gas. Spillages will be slippery when wet.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions.
Conditions to Avoid: Incompatible materials, moisture.
Incompatible Materials: Acids, active metals.
Hazardous Decomposition Products: Oxides of sulphur.
Hazardous Reactions: Will react vigorously or violently with acids, generating carbon dioxide. In the presence of moisture, corrosive to active metals, generating hydrogen.

Section 11: Toxicological Information

Health Effects:

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

Acute:	Swallowed:	May cause severe irritation and abdominal pain, vomiting, diarrhoea, ulceration and/or bleeding from the stomach, duodenum or small intestine. May cause shock and collapse.
	Skin:	May cause irritation and possible skin burns, particularly when wet.
	Eyes:	Corrosive to moist eye tissues. May cause severe irritation and possible burns. Risk of permanent injury.
	Inhaled:	Inhaled dust will irritate the respiratory system. May cause a burning pain in the nose and throat, coughing, wheezing and shortness of breath. May cause delayed onset pulmonary oedema (fluid build-up in the lungs).
Chronic:		Repeated skin contact may lead to irritation, burns and dermatitic effects. Prolonged or repeated inhalation exposure may lead to nosebleeds, nasal congestion, erosion of the teeth, perforation of the nasal septum, chest pains and bronchitis.
LD50:	Sodium carbonate anhydrous	4,090 mg/kg oral, rat. 6,600 mg/kg oral, mouse.
	Sodium metasilicate pentahydrate	1,153 mg/kg oral, rat. 770 mg/kg oral, mouse.
LC50:	Sodium carbonate anhydrous	2,300 mg/m ³ /2 hours, rat. 1,200 mg/m ³ /2 hours, mouse.
TDL0:	Sodium metasilicate pentahydrate	1,000 µL/kg oral, man - changes in kidney tubules, haemoglobin in the urine, nausea or vomiting.

Section 12: Ecological Information

Ecotoxicity:	Harmful to aquatic organisms.
Persistence and degradability:	One of the surfactants used in this product is not considered to be readily biodegradable.
Mobility:	Readily transported by water.
Environmental Fate:	No data.
Bioaccumulative potential:	No data.
Other adverse environmental effects:	Contains surfactants. Local concentrations may be harmful to aquatic organisms, including fish. Contains 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 or the environment.
Do not use metal containers.

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.
Packaging group:	III
Special precautions for user:	Do not store or transport with dangerous goods of classes 1, 4.3, 5.1, 5.2, 7, 8 (acids), foodstuffs 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 5
Alkaline salts with pH > 11.5

Dangerous Goods: Yes. UN 3253 8/III 2 X.

Carcinogen:	Australia	IARC	NTP	RTECS
	No.	No.	No.	No.

Agricultural and Veterinary Chemicals Act:

This product is registered with the Australian Pesticides and Veterinary Medicines Authority (**APVMA**).

Australian Inventory of Chemical Substances (AICS): Listed.

Other National/International Regulations: No data found.

Section 16: Other information

Date of MSDS update: September 2009
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).
NTP - National Toxicology Program (USA).
RTECS - Registry of Toxic Effects of Chemical Substances.

Literature references:

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.