Safety Data Sheet

GALAXIE CONSTRUCTION CHEMICALS

Hazardous, NON-Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: GALAXIE WP SDW 7

Synonyms	**Product Code**
Galaxie WP SDW 7 20KG	GALSDW720

Recommended use: High Solids Silicate Densifier Waterproofer.

Supplier:	Tam Australia Pty Ltd
ABN:	35 637 639 251
Street Address:	314 Glen Osmond Road, Myrtle Bank, SA 5064 Australia
Website	tamaustralia.com.au

Emergency Telephone number: **Australia – 131 126, New Zealand 0800 764 766**

2. HAZARDS IDENTIFICATION

This material is hazardous according to the criteria of Safe Work Australia GHS 7.

Signal Word
Danger

Hazard Classifications
Acute toxicity (oral) – Category 5 (may be harmful if swallowed)
Serious eye damage – Category 1 (causes serious eye damage)
Skin irritation – Category 2 (causes skin irritation)

Hazard Statements

H303	May be harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage

Prevention Precautionary Statements

P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response Precautionary Statements

P301+P312	IF SWALLOWED: Call a poison centre or doctor if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P310	Immediately call a POISON CENTRE/doctor.
P362+P364	Take off contaminated clothing and wash it before reuse.

Storage Precautionary Statements

P405	Store locked up.

General Precautionary Statement

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P501	Dispose of contents/container in accordance with local, regional, national and international regulations.

Poison Schedule: Scheduled Poison S5

DANGEROUS GOOD CLASSIFICATION

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Sodium Silicate	1344-09-8	30-60 % (w/w)
Ingredients determined to be non-hazardous or below reporting limits		Balance
		100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Not expected to be an inhalation hazard under normal use. Spray mist may cause respiratory irritation and coughing. Remove victim to fresh air. Seek medical attention if health effects develop or persist.

Skin Contact: Immediately wash contaminated skin with plenty of water. Remove soaked clothing while washing and continue washing skin with running water for at least 30 minutes. Do not attempt to neutralise with acid solutions, as this could aggravate the burns. Seek medical attention if health effects develop or persist.

Eye contact: Hold eyelids apart and flush the eyes continuously with running water for at least 15 minutes, or until advised to stop by the Poisons Information Centre or a doctor. Remove contact lenses if present and easy to do so. Seek medical attention if irritation develops.

Ingestion: Immediately rinse mouth with water and repeat until the product is thoroughly removed. Give water to drink. Do NOT induce vomiting due to risk of further damage. If vomiting occurs, give further water. Seek medical attention.

PPE for First Aiders: Wear chemical resistant gloves, chemical goggles and protective clothing. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically as for strong alkalis.

5. FIRE FIGHTING MEASURES

Hazchem Code: Not applicable.

Suitable extinguishing media: Dry chemical, water spray, regular foam and carbon dioxide.

No media identified as unsuitable.

Specific hazards: Aqueous solution, non-combustible under normal conditions of use. Flammable hydrogen gas may be produced on prolonged contact with metals such as aluminium, tin, lead and zinc.

Fire fighting further advice: Product is non-combustible. If overheated, the solution will boil and release irritating sodium silicate–containing mists. Wear chemical goggles, body-covering protective clothing, chemical resistant gloves and rubber boots.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS
Avoid contact with skin and eyes. Prevent runoff from entering storm sewers or waterways. Use sand or earth to contain spilled material. Shovel dried waste into a suitable container and dispose of in accordance with Section 13.

LARGE SPILLS
Keep unnecessary people away; isolate the hazard area and deny entry. Note that spilled liquid is very slippery and dries to a glass film that can cut skin. Stop the leak if it is safe to do so. Prevent runoff into storm sewers or waterways. Isolate, dike and contain discharged material with sand or earth; spilled liquid may be collected with a vacuum truck. If containment is not possible, neutralise the contaminated area and flush with large quantities of water. Dispose of collected material in accordance with Section 13.

Dangerous Goods – Initial Emergency Response Guide No: Not applicable
with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing spray mist. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Take appropriate precautions if handling bulk product while hot, as it can cause thermal burns.

Storage: Store in accordance with all local regulations and codes of practice. Keep containers labelled and closed when not in use. Storage temperature 0–70°C; loading temperature 10–50°C. Mild steel or clean plastic is the most suitable material of construction for drums, tanks, valves and pipework. Do not store in aluminium, fibreglass, copper, brass, zinc or galvanised containers. Store away from acids, reactive metals, ammonium salts and foodstuffs.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

	TWA	STEL
Sodium silicate	Not established (2 mg/m³ peak limitation recommended by analogy with sodium hydroxide)	Not established

As published by Safe Work Australia. No exposure standard has been established for the ingredients in this product; the peak limitation figure above is the manufacturer's recommended limit for good practice, by analogy with sodium hydroxide.
Biological Limit Values: Not allocated for the ingredients in this material.
Engineering Measures: Use in a well-ventilated area. Avoid generating and inhaling mists.
Personal Protection Equipment: CHEMICAL GOGGLES / FACE SHIELD, CHEMICAL RESISTANT GLOVES, CHEMICAL RESISTANT CLOTHING, PROTECTIVE BOOTS.
Eye/Face: Wear chemical resistant goggles in combination with a full face shield where contact is likely; ensure a suitable eyewash station is nearby. Skin/Body: wear chemical resistant overalls, a full apron or

similar clothing, plus chemical resistant boots. Hand: wear chemical resistant gloves, with full arm-length gauntlets where contact is likely; wear cut-resistant gloves when handling dried silicate, which can cause cuts and abrasions. Respiratory: not normally required due to low inhalation risk; if material is likely to be vaporised, use an approved respirator.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Wash hands before eating, drinking or smoking. Avoid contact with clothing. Ensure eyewash stations and safety showers are close to the workstation location.

WA - The time-weighted average airborne concentration over an eight-hour working day, for a five-dayworking week over an entire working life.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Colour:	Colourless (clear to hazy)
Odour:	Odourless
Solubility:	Soluble in water
Specific Gravity:	1.3 – 1.35
Solids Content:	30 – 60%
Relative Vapour Density (air=1):	Not applicable
Vapour Pressure:	Not determined
Flash Point (°C):	N App (water based)
Flammability Limits (%):	N App
Autoignition Temperature (°C):	N App
Melting Point/Range (°C):	Approx. 0
Boiling Point/Range (°C):	Approx. 101
pH:	11 – 13 (concentrate)
Viscosity:	20 – 5000 cps
Total VOC (g/Litre):	0

(Typical values only – consult specification sheet. N App = Not applicable)

(Typical values only - consult specification sheet)
N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: Stable in sealed containers. Absorbs carbon dioxide on exposure to air, resulting in deposition of insoluble silica.

Conditions to avoid: Prolonged exposure to carbon dioxide in the air; prolonged storage above 50°C or below 10°C.

Incompatible materials: Reacts exothermically with acids. Not compatible with aluminium, copper, brass, bronze, zinc, tin and lead. Can etch glass if not promptly removed.

Hazardous decomposition products: If overheated, the solution will boil and release irritating sodium silicate-containing mists.

Hazardous reactions: Flammable hydrogen gas will form on reaction with aluminium, copper, zinc and similar metals. Gels and generates heat when mixed with acid. May react with ammonium salts, releasing ammonia gas.

11. TOXICOLOGICAL INFORMATION

Acute Effects

Inhalation: Exposure to vapours at room temperature is unlikely due to low vapour pressure. Spray mist may

cause respiratory irritation, coughing and inflammation of the nose, throat and windpipe.

Skin contact: Irritating to skin; may cause itching and skin rash.

Ingestion: May cause nausea, vomiting, abdominal pain and diarrhoea, and severe irritation to the mouth, throat and stomach.

Eye contact: A severe eye irritant. May cause conjunctivitis and possibly corneal burns and ulceration.

Acute toxicity

Ingestion: Acute Oral Toxicity LD50 (rat): >3000 mg/kg (product basis).

Corrosion/Irritancy: Eye – causes serious eye damage (Category 1). Skin – causes skin irritation (Category 2); primary irritation index of 3 on abraded skin, 0 on intact skin.

Sensitisation: Not sensitising in a mouse local lymph node assay (sodium metasilicate). A single case of contact urticaria has been reported in humans.

Chronic Toxicity

Mutagenicity: Soluble silicates did not induce gene mutations in bacteria or chromosomal aberrations in mammalian cell studies; no evidence of genotoxic potential.

Carcinogenicity: Not listed by IARC, NTP or OSHA as a carcinogen. Frequent ingestion of gram quantities over extended periods has been associated with kidney stones and other siliceous urinary calculi.

Reproductive toxicity: No indications of reproductive or developmental effects reported for silicates in available studies.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways. Soluble in water; sinks and mixes with water. Only water will evaporate from this material.

Group	Type	Test	Molar Ratio	Dose Rate
Fish	Danio rerio	LC50 (96h)	MR 1.0	210 mg/l
Fish	Oncorhynchus mykiss	LC50 (96h)	MR 3.1	260-310 mg/l
Invertebrate	Daphnia Magna	EC50 (48h)	MR 3.2	1700 mg/l
Microorganisms	Pseudomonas putida	EC0 (18h)	MR 3.46	348 mg/l

Persistence and degradability: Not persistent in aquatic systems, but high pH when undiluted or unneutralised is acutely harmful to aquatic life. Diluted material rapidly depolymerises to dissolved silica indistinguishable from natural dissolved silica. Does not contribute to BOD.

Bioaccumulative potential: Does not bioaccumulate, except in species that use silica as a structural material (e.g. diatoms, siliceous sponges). Neither silica nor sodium appreciably bioconcentrate up the food chain.

Mobility: Expected to be mobile in soil. Diluted material rapidly depolymerises to dissolved silica.Avoid contaminating waterways.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protective equipment is used – see Section 8 of this SDS.

Dispose of in accordance with Local, State & Federal EPA waste regulations. Normally suitable for disposal at an approved landfill site after dilution or neutralisation. Not suitable for incineration.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods

by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

MARINE TRANSPORT
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

AIR TRANSPORT
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

This material is not subject to the following international agreements:
Montreal Protocol (Ozone depleting substances)
The Stockholm Convention (Persistent Organic Pollutants)
The Rotterdam Convention (Prior Informed Consent)
Basel Convention (Hazardous Waste)
International Convention for the Prevention of Pollution from Ships (MARPOL)

This material/constituent(s) is covered by the following requirements:

Poison Schedule: Scheduled Poison S5 (SUSMP). Labelling requirements of the SUSMP do not apply where the product is packed and sold solely for dispensary, industrial, laboratory or manufacturing purposes and is labelled in accordance with the workplace hazardous substances labelling code.
AICIS Status: All components of this product are listed on or exempt from the Australian Inventory of Industrial Chemicals (AIIC).
NZ EPA Status: All components of this product are listed on or exempt from the New Zealand Inventory of Chemicals (NZIoC). HSNO classification: 6.3A (irritating to skin), 8.3A (corrosive to ocular tissue).

16. OTHER INFORMATION

Reason for issue: Revised

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since the company cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.