

Safety Data Sheet

1. IDENTIFICATION OF THE PRODUCT AND THE SUPPLIER

1.1 Product identifiers

Product name : SODIUM TRIPOLYPHOSPHATE

1.2 Other means of identification

Pentasodium triphosphate; STPP

1.3 Recommended use of the product and restrictions on use

Detergent; Water conditioning agent; Food additive.

Details of supplier of the safety data sheet

Company : AGent Sales & Services Pty Ltd

Street address : 38 May Holman Drive, Bassendean, Western Australia 6054

Telephone : (+61 8) 6270 4500 / 1300 833 844

Fax : (+61 8) 6270 4544

1.4 Emergency telephone number

Telephone : 1800 995 539

2. HAZARDS IDENTIFICATION

Classified as Non-Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

HAZARDOUS according to the criteria of the 7th Edition Globally Harmonised System (GHS) of Classification and Labelling of Chemicals & Safe Work Australia.

Not Scheduled according to Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

2.1 GHS Classification

Serious Eye Damage/Irritation – Category 2A

Specific Target Organ Toxicity (Single Exposure) – Category 3

GHS Label elements, including precautionary statements



Signal word : Warning

Hazard statement(s)

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary Statement(s)

Prevention:

P261 Avoid breathing dusts or mists.

P271 Use only outdoors or in well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.

Response:

P301 + P312 IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

P330 Rinse mouth.

P304 + P340	IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTRE or doctor if you feel unwell.
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.
P337 + P313	If eye irritation persists: Get medical advice / attention.
Storage:	
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
Disposal:	
P501	Dispose of contents/container in accordance with local, regional & national regulations.

2.2 Other hazards

None

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS Number	Classification	Concentration (%)
Sodium tripolyphosphate	7758-29-4	Eye Dam. 2A; STOT 3; H319; H335	≤ 100

For the full text of the H-Statements mentioned in this section, see Section 16

4. FIRST AID MEASURES

4.1 Description of First Aid measures

General advice

Contact the Poisons Information Centre (Phone: Australia 131 126; New Zealand 0800 764 766) or consult a doctor/physician. Show this safety data sheet to the doctor in attendance.

If inhaled

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention. Apply resuscitation if victim is not breathing. Administer oxygen if breathing is difficult.

In case of skin contact

If on skin (or hair): Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention

In case of eye contact

Promptly flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention.

If swallowed

Rinse mouth, then drink plenty of water. Do not induce vomiting. Get medical advice/attention if you feel unwell. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in Section 2.2 and/or Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

4.4 First Aid facilities

Eye wash facilities and safety shower should be available.

5. FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media

If material is involved in a fire, use dry chemical, Carbon dioxide (CO₂), foam or water spray for extinction - Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the chemical

Non-combustible; Not considered a significant fire risk, however containers may burn.

Risk of violent reaction or explosion! May decompose explosively when heated or involved in a fire. May explode from heat or contamination. May ignite combustibles. Containers may explode when heated. Fire or heat may produce irritating, toxic and/or corrosive fumes, including Phosphorus oxides (POx), metal oxides.

Contain runoff from fire control or dilution water - Runoff may pollute waterways.

5.3 Special protective equipment and precautions for fire fighters

Wear self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection.

5.4 Hazchem code

None allocated

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Do not touch or walk through spilled material. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing. Spill or leak area should be isolated immediately. Keep unauthorised personnel away.

For personal protection see Section 8

6.2 Environmental precautions

Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Prevent dust cloud.. Observe all local and national regulations.

6.3 Methods and materials for containment and cleaning up

Collect material (dry-sweep or vacuum up) and place it in suitable, properly labelled containers for recovery or disposal (see Section 13). Rinse away residues with water.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation - Use only outdoors or in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation. Avoid breathing dust and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see Section 8)

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep containers closed when not in use - Check regularly for leaks/spills. Avoid physical damage to containers. Protect from moisture. Keep away from foodstuffs and incompatible materials (see Section 10). Store locked up. Keep in the original container, polyethylene or polypropylene container. Check all containers are clearly labelled and free from leaks.

This material is not classified as a Dangerous Goods by the criteria of the ADG.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters - Occupational Exposure Limits

No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). However, the exposure standard for dust not otherwise specified:

Chemical Name	Reference	TWA – Peak Limitation		STEL		Carcinogen Category	Notices
		ppm	mg/m ³	ppm	mg/m ³		
Inspirable dust	ASCC		10			-	-
Respirable dust	ASCC		3				

As published in "Workplace Exposure Standards for Airborne Contaminants, December 2011" by SWA.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Biological Limits

No data available

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Ensure ventilation is adequate to maintain air concentrations below Exposure Standards.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Personal protective equipment (PPE)

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods and environmental factors.

Eye/face protection

Wear appropriate eye protection to prevent eye contact. Recommended: safety glasses with side shields or chemical goggles (AS/NZS 1336 & 1337).

Skin protection

Wear appropriate protective gloves (rubber, neoprene or PVC), long-sleeved protective clothing (overalls) and safety footwear appropriate for the risk of exposure (AS 2161 and AS/NZS 2210). Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use. Wash and dry hands.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a P2 dust mask/particulate filter respirator when handling this product (AS/NZS 1715 & 1716).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Form : Solid, powder or granules Colour : White
Odour:	Odourless
Odour Threshold:	No data available
pH:	9.2 – 10.2 (10 g/L solution @ 20°C)
Melting Point:	Approx. 600°C
Boiling Point/Range:	No data available
Decomposition Temperature:	> 600°C
Evaporation Rate:	No data available
Flash Point:	No data available
Flammability Limits:	Not applicable
Auto-ignition Temperature:	No data available
Bulk Density:	380 – 1000 kg/m ³
Specific Gravity	No data available
Vapour Density (air=1):	No data available
Vapour Pressure:	No data available
% Volatiles:	No data available
Solubility in water:	148 g/L (@ 20°C)

10. STABILITY AND REACTIVITY

10.1 Reactivity

Reacts with metals liberating flammable hydrogen gas. Phosphates are susceptible to formation of highly toxic and flammable phosphine gas in the presence of strong reducing agents, such as hydrides.

10.2 Chemical stability

Stable under normal conditions of use, storage and temperature.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Keep away from heat. Protect from moisture.

10.5 Incompatible materials

Incompatible/reactive with oxidising agents, reducing agents, metals

10.6 Hazardous decomposition products

May emit poisonous fumes, including Phosphorus oxides (PO_x), metal oxides.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD₅₀ Oral (Rat- male & female): >2,000 mg/kg
LD₅₀ Dermal (Rabbit): >3,160 mg/kg (Supplier's SDS)
LC₅₀ Inhalation (Rat – male & female): > 0.39 mg/L, 4h

Skin corrosion/irritation

Skin – Rabbit: No skin irritation, 4h.

Serious eye damage/eye irritation

Eyes – Rabbit: No eye irritation.

Respiratory or skin sensitisation

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available.

Specific target organ toxicity (STOT) - single exposure

No data available.

Specific target organ toxicity (STOT) - repeated exposure

No data available

Aspiration hazard

No data available

Health Effects

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Eye contact : Causes serious eye damage

Skin contact : There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons.

Ingestion : Use as a food additive indicates good tolerance of small amounts, but excessive amounts or overuse may bring irritant and/or harmful effects. Effects can include vomiting, tiredness, fever, diarrhoea, low blood pressure, slow pulse, cyanosis, spasms of the wrist, coma and severe body spasms.

Inhalation : No information available.

11.2 Information on possible routes of exposure

The substance can be absorbed into the body by inhalation of its dust, ingestion and/or eye contact.

11.3 Additional Information

RTECS: YK4570000

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Avoid contaminating waterways.

Toxicity to fish:

LC₅₀ (Danio rerio, zebra fish): > 1,850 mg/L, 24h

Toxicity to daphnia & other aquatic invertebrates

EC₅₀ (Daphnia magna, water flea): 100 mg/L, 48h

Toxicity to algae & aquatic plants:

ErC₅₀ (Desmodesmus subspicatus, green algae): ca.160 mg/L, 4d

Toxicity to bacteria:

EC₅₀ (activated sludge): >1,000 mg/L, 3h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available. Inorganic compounds in contact with the soil, subsurface or surface waters may be taken up by plants and utilised as essential nutrients. The principal problems of phosphate contamination of the environment relates to eutrophication processes in lakes and ponds.

Phosphates may also form precipitates, usually in the form of calcium or magnesium. The resultant compounds are insoluble in water and become part of the soil or sediment.

12.5 Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Disposal methods and containers

Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.

13.3 Special precautions for landfill or incineration

Contact a specialist disposal company or the local waste regulator for advice.

14. TRANSPORT INFORMATION

Classified as **NON-DANGEROUS GOODS** by the criteria of the ADG Code for transport by road or rail.

Classified as **NON-DANGEROUS GOODS** by the criteria of the IMDG Code for transport by sea.

Classified as **NON-DANGEROUS GOODS** by the criteria of the IATA Code for transport by air.

14.1 UN number

ADG : Not allocated

IMDG : Not allocated

IATA : Not allocated

14.2 Proper shipping name

ADG : SODIUM TRIPOLYPHOSPHATE

IMDG : SODIUM TRIPOLYPHOSPHATE

IATA : SODIUM TRIPOLYPHOSPHATE

14.3 Transport hazard class

ADG : Not allocated

IMDG : Not allocated

IATA : Not allocated

14.4 Packing group

ADG : Not allocated

IMDG : Not allocated

IATA : Not allocated

14.5 Environmental hazards

ADG : No

IMDG Marine Pollutant : No

IATA : No

14.6 Special precautions for users

No data

14.7 Hazchem code

ADG : Not allocated

IMDG EMS : Not allocated

IATA : Not allocated

14.8 Dangerous goods initial emergency response guide (SAA/SNZ HB76:2010)

Not allocated

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Not scheduled

Carcinogen classification under WHS Regulations 2011, Schedule 10

Not listed

Notification status

AICS On the inventory, or in compliance with the inventory.

16. OTHER INFORMATION

Key / legend to abbreviations and acronyms used in the MSDS

ADG	Australian Dangerous Goods
ASCC	Australian Safety and Compensation Council
DEC	Department of Environment and Conservation
GHS	Globally Harmonised System of Classification & Labelling of Chemicals
NOHSC	National Occupational Health and Safety Commission
RTECS	Registry of Toxic Effects of Chemical Substances.
SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons
DNEL	Derived No-Effect Level
DMEL	Derived Minimal Effect Level
PNEC	Predicted No-Effect Concentration
TWA	Time weighted average
STEL	Short term exposure level
SWA	Safe Work Australia
Eye Dam. 2A	Serious Eye Damage/ Irritation – Category 2A
STOT 3	Single Target Organ Toxicity (Single Exposure)- Category 3
Ser. Eye Dam. 1	Serious Eye Damage/ Eye Irritation Category 1
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
Peak Limitations	A ceiling concentration that should not be exceeded over a measurement period, which should be as short as possible, but not exceeding 15 minutes
LD ₅₀	Lethal dose 50. The single dose of a substance that causes the death of 50% of an animal population from exposure to the substance by any route other than inhalation
TD Lo	The lowest dose of a substance known to have produced signs of toxicity
RTECS	Registry of Toxic Effects of Chemical Substances
g/L	Grams per litre
g/cm ³	Grams per cubic centimetre
mg/m ³	Milligrams per cubic metre
mg/kg	Milligrams per kilogram
pH	Relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly alkaline
WHS	Work Health and Safety

Literature references

“Workplace Exposure Standards for Airborne Contaminants, December 2011” by SWA Work Health and Safety Regulations 2011

“Registry of Toxic Effects of Chemical Substances”. Ed. D. Sweet, US Dept. of Health & Human Services: Cincinnati, 2012.

Reason(s) for Issue:

Issue of SDS

Disclaimer

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