

1. IDENTIFICATION

Product Name	Sodium tripolyphosphate
Other Names	Pentasodium triphosphate; STPP
Uses	Detergent; Water conditioning agent; Food additive.
Chemical Family	No Data Available
Chemical Formula	Na ₅ P ₃ O ₁₀
Chemical Name	Triphosphoric acid, pentasodium salt
Product Description	No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Pty Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Pty Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) Not Scheduled

Globally Harmonised System

Hazard Classification	NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)		
Hazard Categories	Skin Corrosion/Irritation - Category 3 Serious Eye Damage/Irritation - Category 2B		
Signal Word	Warning		
Hazard Statements	H316	Causes mild skin irritation.	
	H320	Causes eye irritation.	
Precautionary Statements	Prevention	P264	Wash hands thoroughly after handling.
	Response	P332 + P313	If skin irritation occurs: Get medical advice/attention.
		P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P337 + P313	If eye irritation persists: Get medical advice/attention.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
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Safe Work Australia

National Guide for Classifying Hazardous Chemicals under the Model WHS Regulations

Hazard Classification	NOT hazardous according to the criteria of Safe Work Australia under Model WHS Regulations
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Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications	Health Hazards	6.1E	Substances that are acutely toxic –May be harmful, Aspiration hazard
		6.4A	Substances that are irritating to the eye

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Sodium tripolyphosphate	Na ₂ HPO ₄	7758-29-4	>94 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth, then drink plenty of water. Do not induce vomiting. Get medical advice/attention if you feel unwell. Never give anything by mouth to an unconscious person.
Eye	IF IN EYES: 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 5 - 15 minutes. If eye irritation persists, get medical advice/attention.
Skin	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin

irritation occurs, get medical advice/attention.

Inhaled	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.
Advice to Doctor	Treat symptomatically.
Medical Conditions Aggravated by Exposure	No Data Available

5. FIRE FIGHTING MEASURES

General Measures	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.
Flammability Conditions	Non-combustible; Material does not burn.
Extinguishing Media	If material is involved in a fire, use dry chemical, Carbon dioxide (CO ₂), foam or water spray for extinction - Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire and Explosion Hazard	Decomposes on heating producing toxic fumes.
Hazardous Products of Combustion	Fire or heat may produce irritating and/or toxic fumes, including oxides of Phosphorus.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may pollute waterways.
Personal Protective Equipment	Full fire kit and self-contained breathing apparatus (SCBA).
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation. Do not touch or walk through spilled material. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing.
Clean Up Procedures	Collect material (sweep or vacuum up) and place it in suitable containers for later disposal (see SECTION 13).
Containment	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas.
Decontamination	Rinse away residues with water.
Environmental Precautionary Measures	Prevent entry into drains and waterways.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away; Keep upwind.
Personal Precautionary Measures	Use personal protective equipment as required (see SECTION 8).

7. HANDLING AND STORAGE

Handling	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation. Avoid breathing dust and contact with eyes, skin and clothing. Use personal protective equipment as required (see SECTION 8).
Storage	Store in a cool, dry and well-ventilated place. Keep containers closed when not in use - Check regularly for spills. Protect from moisture. Keep away from incompatible materials (oxidising agents, reducing agents, metals).
Container	Keep in the original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards are available for this product. For dusts from solid substances without specific occupational exposure standards: - Safe Work Australia Exposure Standard (Nuisance dusts): 8 hr TWA = 10 mg/m ³ (measured as inhalable dust). - New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m ³ (total); TWA = 3 mg/m ³ (respirable).
Exposure Limits	No Data Available
Biological Limits	No information available.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal Protection Equipment	- Respiratory protection: Wear respiratory protection in case of inadequate ventilation or an inhalation risk exists. Recommended: Dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: safety glasses with side shields or chemical goggles. - Hand protection: Handle with gloves. Recommended: Impervious gloves. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls, safety shoes.
Special Hazards Precautions	No information available.
Work Hygienic Practices	Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Powder or granules
Odour	Odourless
Colour	White
pH	9.2 - 10.2 10 g/l @ 20 °C
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	>=1,000 °C
Melting Point	~622 °C
Freezing Point	No Data Available
Solubility	approx. 150 g/l @ 20 °C - approx. 180 g/l @ 60 °C
Specific Gravity	No Data Available
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	380 - 1,000 kg/m ³
Corrosion Rate	No Data Available
Decomposition Temperature	>600 °C
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	367.86
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available

Viscosity	No Data Available
Volatile Percent	0.5 - 1 %
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	No information available.
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	Non-combustible; Material does not burn.
Reactions That Release Gases or Vapours	Decomposes on heating producing toxic fumes, including oxides of Phosphorus.
Release of Invisible Flammable Vapours and Gases	Reacts with metals liberating flammable hydrogen gas.

10. STABILITY AND REACTIVITY

General Information	Reacts with metals liberating flammable hydrogen gas.
Chemical Stability	Stable under recommended storage conditions.
Conditions to Avoid	Keep away from heat. Protect from moisture.
Materials to Avoid	Incompatible/reactive with oxidising agents, reducing agents, metals.
Hazardous Decomposition Products	Decomposes on heating producing toxic fumes, including oxides of Phosphorus.
Hazardous Polymerisation	Will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	Information on possible routes of exposure: - Ingestion: May cause gastrointestinal irritation, vomiting. - Eye contact: Causes eye irritation, redness, pain. - Skin contact: May cause skin irritation, redness, pain. - Inhalation: Dust may cause respiratory irritation, cough, sore throat.
Acute	
Ingestion	Acute toxicity (Oral): - LD50, Rat: >2,000 mg/kg.
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to Bacteria: - EC50, Activated sludge: >1,000 mg/l (48 h) [OECD 209].
Persistence/Degradability	Not applicable to inorganic compounds.
Mobility	No information available.
Environmental Fate	Inorganic compounds in contact with the soil, subsurface or surface waters may be taken up by plants and utilised as essential nutrients. 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. No information available.

Bioaccumulation Potential**Environmental Impact**

No Data Available

13. DISPOSAL CONSIDERATIONS**General Information**

Dispose of contents/container in accordance with local/regional/national regulations.

Special Precautions for Land Fill

No information available.

14. TRANSPORT INFORMATION**Land Transport (Australia)**

ADG Code

Proper Shipping Name	Sodium tripolyphosphate
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (Malaysia)

ADR Code

Proper Shipping Name	Sodium tripolyphosphate
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (New Zealand)

NZS5433

Proper Shipping Name	Sodium tripolyphosphate
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Comments NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (United States of America)

US DOT

Proper Shipping Name Sodium triphosphate
Class No Data Available
Subsidiary Risk(s) No Data Available
No Data Available
UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available
Comments NON-DANGEROUS GOODS: Not regulated for LAND transport.

Sea Transport

IMDG Code

Proper Shipping Name Sodium triphosphate
Class No Data Available
Subsidiary Risk(s) No Data Available
UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available
EMS No Data Available
Marine Pollutant No
Comments NON-DANGEROUS GOODS: Not regulated for SEA transport.

Air Transport

IATA DGR

Proper Shipping Name Sodium triphosphate
Class No Data Available
Subsidiary Risk(s) No Data Available
UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available
Comments NON-DANGEROUS GOODS: Not regulated for AIR transport.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

15. REGULATORY INFORMATION

General Information No Data Available
Poisons Schedule (Aust) Not Scheduled

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code HSR003416

National/Regional Inventories

Australia (AICS)	Listed
Canada (DSL)	Not Determined
Canada (NDSL)	Not Determined
China (IECSC)	Not Determined
Europe (EINECS)	231-838-7
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Not Determined
Korea (KECI)	Not Determined
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Not Determined
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Not Determined

16. OTHER INFORMATION

Related Product Codes

SOTRIF1000, SOTRIF1001, SOTRIF1002, SOTRIF1003, SOTRIF1004, SOTRIF1005, SOTRIF1006, SOTRIF1007, SOTRIF1008, SOTRIF1009, SOTRIF1300, SOTRIF1500, SOTRIF1501, SOTRIF1600, SOTRIF1700, SOTRIF1800, SOTRIF1801, SOTRIF1802, SOTRIF1803, SOTRIF1804, SOTRIF1805, SOTRIF1806, SOTRIF1807, SOTRIF1900, SOTRIF2000, SOTRIF2001, SOTRIF2002, SOTRIF2003, SOTRIF2100, SOTRIF2200, SOTRIF2500, SOTRIF2600, SOTRIF2700, SOTRIF3000, SOTRIF3100, SOTRIF3200, SOTRIF3300, SOTRIF3301, SOTRIF3303, SOTRIF3320, SOTRIF3321, SOTRIF3323, SOTRIF3340, SOTRIF4000, SOTRIF4001, SOTRIF4100, SOTRIF4200, SOTRIF4300, SOTRIF4400, SOTRIF5000, SOTRIF5100, SOTRIF5200, SOTRIF5300, SOTRIF5400, SOTRIF5500, SOTRIF5600, SOTRIF5700, SOTRIF6000, SOTRIF6010, SOTRIF6200, SOTRIF6400, SOTRIF7000, SOTRIF7030, SOTRIF7100, SOTRIF7200, SOTRIF7300, SOTRIF7400, SOTRIF7420, SOTRIF7500, SOTRIF7600, SOTRIF7800, SOTRIF8000, SOTRIF8100, SOTRIF8200, SOTRIF8300, SOTRIF8301, SOTRIF8302, SOTRIF8400, SOTRIF8500, SOTRIF8600, SOTRIF8700, SOTRIF8701, SOTRIF9300, SOTRIF9900, SOTRIP0300, SOTRIP0400, SOTRIP0500, SOTRIP0600, SOTRIP0700, SOTRIP0800, SOTRIP0801, SOTRIP0900, SOTRIP1000, SOTRIP1001, SOTRIP1002, SOTRIP1003, SOTRIP1004, SOTRIP1005, SOTRIP1006, SOTRIP1007, SOTRIP1008, SOTRIP1009, SOTRIP1010, SOTRIP1011, SOTRIP1012, SOTRIP1013, SOTRIP1014, SOTRIP1015, SOTRIP1016, SOTRIP1017, SOTRIP1018, SOTRIP1019, SOTRIP1020, SOTRIP1021, SOTRIP1022, SOTRIP1023, SOTRIP1024, SOTRIP1025, SOTRIP1026, SOTRIP1027, SOTRIP1028, SOTRIP1029, SOTRIP1030, SOTRIP1031, SOTRIP1032, SOTRIP1033, SOTRIP1034, SOTRIP1035, SOTRIP1036, SOTRIP1037, SOTRIP1038, SOTRIP1039, SOTRIP1040, SOTRIP1041, SOTRIP1042, SOTRIP1043, SOTRIP1044, SOTRIP1045, SOTRIP1046, SOTRIP1047, SOTRIP1048, SOTRIP1049, SOTRIP1050, SOTRIP1051, SOTRIP1052, SOTRIP1053, SOTRIP1054, SOTRIP1100, SOTRIP1200, SOTRIP1201, SOTRIP1202, SOTRIP1300, SOTRIP1400, SOTRIP1500, SOTRIP1600, SOTRIP1700, SOTRIP1800, SOTRIP1801, SOTRIP1802, SOTRIP1803, SOTRIP1804, SOTRIP1805, SOTRIP1806, SOTRIP1807, SOTRIP1808, SOTRIP1809, SOTRIP1810, SOTRIP1811, SOTRIP1812, SOTRIP1813, SOTRIP1814, SOTRIP1815, SOTRIP1816, SOTRIP1817, SOTRIP1818, SOTRIP1819,

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Revision

3

Revision Date

01 Feb 2018

Key/Legend

< Less Than

> Greater Than

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square Centimetres

CO₂ Carbon Dioxide

COD Chemical Oxygen Demand

deg C (°C) Degrees Celcius

EPA (New Zealand) Environmental Protection Authority of New Zealand

deg F (°F) Degrees Farenheit

g Grams

g/cm³ Grams per Cubic Centimetre

g/l Grams per Litre

HSNO Hazardous Substance and New Organism

IDLH Immediately Dangerous to Life and Health

immiscible Liquids are insoluable in each other.

inHg Inch of Mercury

inH₂O Inch of Water

K Kelvin

kg Kilogram

kg/m³ Kilograms per Cubic Metre

lb Pound

LC₅₀ LC stands for lethal concentration. LC₅₀ is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

LD₅₀ LD stands for Lethal Dose. LD₅₀ is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

ltr or **L** Litre

m³ Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 Hours

mg/kg Milligrams per Kilogram

mg/m³ Milligrams per Cubic Metre

Misc or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH₂O Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Health and Safety Commission

OECD Organisation for Economic Co-operation and Development

Oz Ounce

PEL Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion

ppm Parts per Million

ppm/2h Parts per Million per 2 Hours

ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight