



1. IDENTIFICATION

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|---------------------|---|
| Product | Spa World Granular Cartridge Cleaner |
| Name Other | Trisodium phosphate, dodecahydrate / Sodium phosphate, tribasic; Trisodium orthophosphate, dodecahydrate |
| Names Uses | Cosmetic, domestic and commercial use in cleaning and/or washing agents or additives; food |
| Chemical Family | additive. No Data Available |
| Chemical Formula | Na ₃ PO ₄ .12H ₂ O |
| Chemical Name | Phosphoric acid, trisodium salt, dodecahydrate |
| Product Description | No Data Available |

Contact Details of the Supplier of this Safety Data Sheet

| | |
|---------------------|------------------|
| Organisation | Telephone |
| Pool Ranger Pty Ltd | +61-2-99793490 |

Emergency Contact Details

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

| Organisation | Location | Telephone |
|----------------------------|--------------------------|------------------------------|
| Poisons Information Centre | Australia – Westmead NSW | 1800-251525 131126 |
| Chemcall | Australia | 1800-127406 +64-4-9179888 |
| National Poison Centre | Malaysia | +60-4-6536-999 |

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) Schedule 5

Globally Harmonised System

| | |
|------------------------------|--|
| Hazard Classification | Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) |
| Hazard Categories | Skin Corrosion/Irritation - Category 2 Serious Eye Damage/Irritation - Category 2A Specific Target Organ Toxicity (Single Exposure) - Category 3 |

Pictograms



| | | | | |
|--------------------------|------------|---|-----------------------------------|--|
| Signal Word | Warning | | | |
| Hazard Statements | H315 | | Causes skin irritation. | |
| | H319 | | Causes serious eye irritation. | |
| | H335 | | May cause respiratory irritation. | |
| Precautionary Statements | Prevention | P280 | | Wear protective gloves/eye protection/face protection. |
| | | P261 | | Avoid breathing dust. |
| | | P271 | | Use only outdoors or in a well-ventilated area. |
| | Response | P302 + P352 | | IF ON SKIN: Wash with plenty of water. |
| | | P337 + P313 | | If eye irritation persists: Get medical advice. |
| | | P312 | | Call a POISON CENTER or doctor if you feel unwell. |
| | | P332 + P313 | | If skin irritation occurs: Get medical advice. |
| | | P305 + P351 + P338 | | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| | Storage | P304 + P340 | | IF INHALED: Remove victim to fresh air and keep comfortable for breathing. |
| | | P362 + P364 | | Take off contaminated clothing and wash it before reuse. |
| | | P403 + P233 | | Store in a well-ventilated place. Keep container tightly closed. |
| | Disposal | P405 | | Store locked up. |
| P501 | | Dispose of contents/container in accordance with local / regional / national / international regulations. | | |

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)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

| Chemical Entity | Formula | CAS Number | Proportion |
|------------------------------------|---|------------|------------|
| Trisodium phosphate, dodecahydrate | Na ₃ PO ₄ .12H ₂ O | 10101-89-0 | 98 - 100 % |

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

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|--|---|
| Swallowed | IF SWALLOWED: Rinse mouth, then drink plenty of water. Do NOT induce vomiting. If vomiting occurs naturally, rinse mouth and repeat administration of water. For advice, contact a Poisons Information Centre or a doctor (at once). Never give anything by mouth to a victim who is unconscious or having convulsions. |
| Eye | IF IN EYES: Immediately 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 flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes. If eye irritation persists, get medical advice/attention. |
| Skin | IF ON SKIN (or hair): Remove contaminated clothing and flush skin and hair with running water for at least 15 minutes. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing before reuse. |
| Inhaled | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor/physician for advice. Apply artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult. |
| Advice to Doctor | Provide general supportive measures and treat symptomatically. |
| Medical Conditions Aggravated by Exposure | No information available. |

5. FIRE FIGHTING MEASURES

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| 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 | Trisodium phosphate, dodecahydrate is not combustible and does not contribute to the intensity of a fire. |
| Extinguishing Media | If material is involved in a fire, use methods for the surrounding fire and other materials involved in the fire. |
| Fire and Explosion Hazard | Closed containers exposed to heat may explode. Solutions can react with metals, such as aluminium, zinc and galvanized iron, to produce highly flammable hydrogen gas, which may explode if ignited. |
| Hazardous Products of Combustion | When involved in a fire, this material may decompose and produce irritating vapours, acrid smoke and toxic gases, including oxides of phosphorous. |
| Special Fire Fighting Instructions | Contain runoff from fire control or dilution water - Runoff may causes pollution. |
| Personal Protective Equipment | Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection. |
| 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

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| 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 | With clean shovel, place material into clean, dry container and cover loosely; move containers from spill area. If sweeping of a contaminated area is necessary use a dust suppressant agent, which does not react with product. |
| Containment | Stop leak if you can do it without risk. Contain the discharged material - Prevent entry into waterways, sewers, basements or confined areas. |
| Decontamination | Thoroughly wash the area after a spill or leak clean-up. |
| Environmental Precautionary Measures | Do not allow the spilled product to enter public drainage system or open water courses. |
| Evacuation Criteria | Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Evacuate the area promptly and keep upwind of the spilled material. |
| Personal Precautionary Measures | Use personal protective equipment as required (see SECTION 8). |

7. HANDLING AND STORAGE

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|------------------|---|
| 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. All employees who handle this material should be trained to handle it safely. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8). |
| Storage | Store in a cool, dry and well-ventilated place, out of direct sunlight. Avoid freezing. Keep container tightly closed when not in use. Keep away from heat and sources of ignition - No smoking. Keep away from incompatible materials (see SECTION 10). Keep this material away from food, drink and animal feed. Store locked up. Material should be stored in secondary containers or in a diked area, as appropriate. *Use corrosion-resistant structural materials, lighting and ventilation systems in the storage area. Floors should be sealed to prevent absorption of this material. Have appropriate extinguishing equipment in the storage area. |
| Container | Keep in the original container. Do not store this material in open or unlabelled containers. Inspect all incoming containers before storage, to ensure containers are properly labelled and not damaged. *Empty containers may contain residual particulates; therefore, empty containers should be handled with care. Do not cut, grind, weld, or drill near this container. Never store food, feed, or drinking water in containers that held this product. |

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: None required where adequate ventilation conditions exist. In case of inadequate ventilation, wear respiratory protection. Recommended: If airborne concentration is high, use an appropriate respirator or dust mask. - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Wear safety glasses (or goggles). - Hand protection: Wear protective gloves. Recommended: Use impervious gloves. Gloves should be tested to determine their suitability for prolonged contact with this material. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Protective apron. |
| Special Hazards Precautions | No information available. |
| Work Hygienic Practices | Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before storage or reuse. |

9. PHYSICAL AND CHEMICAL PROPERTIES

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|----------------------------------|-------------------------------------|
| Physical State | Solid |
| Appearance | Crystalline powder |
| Odour | Odourless |
| Colour | White |
| pH | 12.0 (1% solution) |
| Vapour Pressure | Zero (@ No Data Available) |
| Relative Vapour Density | No Data Available |
| Boiling Point | No Data Available |
| Melting Point | 73 °C |
| Freezing Point | No Data Available |
| Solubility | Soluble in water (28 g/100 mL) 16°C |
| Specific Gravity | 1.62 |
| Flash Point | No Data Available |
| Auto Ignition Temp | No Data Available |
| Evaporation Rate | No Data Available |
| Bulk Density | No Data Available |
| Corrosion Rate | No Data Available |
| Decomposition Temperature | No Data Available |
| Density | No Data Available |
| Specific Heat | No Data Available |
| Molecular Weight | 380.12 |
| 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 | No Data Available |
| 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 | Trisodium phosphate, dodecahydrate is not combustible and does not contribute to the intensity of a fire. |
| Reactions That Release Gases or Vapours | This material may decompose and produce irritating vapours, acrid smoke and toxic gases, including oxides of phosphorous. |
| Release of Invisible Flammable Vapours and Gases | Solutions can react with metals, such as aluminium, zinc and galvanized iron, to produce highly flammable hydrogen gas, which may explode if ignited. |

10. STABILITY AND REACTIVITY

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|----------------------------------|--|
| General Information | Trisodium Phosphate can react with air to form disodium phosphate and sodium carbonate. Trisodium phosphate forms strong caustic solution, similar to soda lye. |
| Chemical Stability | Stable under conditions of standard temperature and pressure. |
| Conditions to Avoid | Avoid high temperatures, exposure to air and incompatible materials. |
| Materials to Avoid | Trisodium phosphate is incompatible with strong acids and may react violently; in solution reaction may cause splattering. In solution, Trisodium phosphate will react with metals such as aluminium, zinc and galvanized iron to form flammable hydrogen gas. Trisodium phosphate may react violently with magnesium. Trisodium phosphate can be corrosive to some metals, including aluminium, zinc and tin. Trisodium phosphate is corrosive to grey cast iron at high temperatures and may be corrosive to steel or brass, if wet. |
| Hazardous Decomposition Products | This material may decompose and produce irritating vapours, acrid smoke and toxic gases, including oxides of phosphorous. Solutions can react with metals such as aluminium, zinc and galvanized iron to produce highly flammable hydrogen gas that may explode if ignited. |
| Hazardous Polymerisation | Will not occur. |

11. TOXICOLOGICAL INFORMATION

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|---------------------|--|
| General Information | <ul style="list-style-type: none"> - Acute toxicity: Ingestion of this product in large volumes may irritate or burn the tissues of the mouth, oesophagus and other tissues of the digestive system. Symptoms of exposure can include vomiting, diarrhoea, and nausea. In severe cases, death may result. The estimated fatal dose of sodium phosphates is 50 g. - Skin corrosion/irritation: Cause skin irritation. This product can cause moderate to severe irritation of the skin, depending on duration and concentration of exposure. Severe exposure or contact in the presence of moisture, or if product is in solution can cause burns. Alkalis penetrate skin slowly. The extent of damage therefore depends on duration of contact. Repeated skin contact to low levels may lead to dermatitis (red, cracked skin). - Eye damage/irritation: Causes serious eye irritation. Exposure to particulates or solution of this product may cause moderate to severe irritation of the eyes, including burns, depending on duration and concentration of contact. Severe contact with the eyes can cause corneal injury, including clouding and burns, which could lead to blindness. Permanent damage (cloudiness of the cornea) has resulted from contact with Trisodium phosphate, anhydrous solution, in two case reports, one involving hot solution. Concentrations were not reported. In another case report, |
|---------------------|--|

SAFETY DATA SHEET REVISION 4, JANUARY 2025

injury occurred as a result of a splash of aqueous solution, but healed within 48 hours (concentration not reported).

- Respiratory/skin sensitisation: No information available.
- Germ cell mutagenicity: No information available.
- Carcinogenicity: Trisodium phosphate is not considered carcinogenic by ACGIH, IARC, NIOSH, NTP or OSHA.
- Reproductive toxicity: No information available.
- STOT (single exposure): May cause respiratory irritation. Breathing dusts or particulates generated by this product or to mists if in solution, can lead to moderate to severe irritation of the nose, throat or respiratory system, depending on duration and concentration of exposure. Symptoms of minor exposure could include coughing, wheezing, and shortness of breath. Severe inhalation exposure can result in pulmonary edema (a condition of fluid in the lungs), which can be fatal.
- STOT (repeated exposure): Long term skin overexposure to this product may lead to dermatitis (red, itchy skin).
- Aspiration toxicity: No information available.

Acute

| | |
|---------------------|---|
| Ingestion | Acute toxicity (Oral): - LD50, Rat: 7,400 mg/kg |
| Other | Acute toxicity (Dermal): - LD50, Rat: >7,940 mg/kg |
| Carcinogen Category | None |

12. ECOLOGICAL INFORMATION

| | |
|---------------------------|--|
| Ecotoxicity | No information available. |
| Persistence/Degradability | No information available. |
| Mobility | No information available. |
| Environmental Fate | Product can be dangerous to aquatic life in high concentrations as it will increase the pH of the aquatic environment. |
| Bioaccumulation Potential | Product is not expected to accumulate in the food chain. |
| 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 | Trisodium phosphate, dodecahydrate |
| 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 | Trisodium phosphate, dodecahydrate |
| 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 | Trisodium phosphate, dodecahydrate |
| 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 | ALKALINE SALTS |
| Poisons Schedule (Aust) | Schedule 5 |

National/Regional Inventories

| | |
|-------------------|----------------|
| Australia (AIC) | Listed |
| Canada (DSL) | Not Determined |
| Canada (NDSL) | Not Determined |
| China (IECSC) | Not Determined |
| Europe (EINECS) | Not Determined |
| Europe (REACH) | Not Determined |
| Japan (ENCS/METI) | Not Determined |

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|--|----------------|
| Korea (KECI) | Not Determined |
| Malaysia (List of Classified Substances) | Not Determined |
| New Zealand (NZIoC) | Listed |
| Philippines (PICCS) | Not Determined |
| Taiwan (TCSI) | Not Determined |
| USA (TSCA) | Not Determined |
| Mexico (INSQ) | Not Determined |

16. OTHER INFORMATION

Related Product Codes TRSODF4100, TRSODF8100, TRSODF8400, TRSODF8700, TRSODF8701, TRSODF8702, TRSODI0700, TRSODI0800, TRSODI0801, TRSODI0802, TRSODI0805, TRSODI0810, TRSODI0820, TRSODI0900, TRSODI1000, TRSODI1001, TRSODI1002, TRSODI1003, TRSODI1004, TRSODI1005, TRSODI1006, TRSODI1007, TRSODI1008, TRSODI1009, TRSODI1010, TRSODI1011, TRSODI1012, TRSODI1013, TRSODI1014, TRSODI1015, TRSODI1016, TRSODI1017, TRSODI1018, TRSODI1019, TRSODI1020, TRSODI1021, TRSODI1022, TRSODI1023, TRSODI1024, TRSODI1025, TRSODI1500, TRSODI1800, TRSODI1801, TRSODI1802, TRSODI1803, TRSODI1804, TRSODI1805, TRSODI2000, TRSODI2001, TRSODI2002, TRSODI2003, TRSODI2004, TRSODI2005, TRSODI2006, TRSODI2007, TRSODI2700, TRSODI3000,

TRSODI3001, TRSODI3002, TRSODI3003, TRSODI3004, TRSODI3005, TRSODI3006, TRSODI3007, TRSODI3008, TRSODI3010, TRSODI3100, TRSODI3101, TRSODI3115, TRSODI3502, TRSODI3503, TRSODI3525, TRSODI4000, TRSODI4200, TRSODI4301, TRSODI4500, TRSODI7000, TRSODI7800, TRSODI8000, TRSODI9000, TRSODI9100, TRSODI9500, TRSODI9600, TRSODI9700, TRSODI9800, TRSODI9900

Revision 4
Revision Date JANUARY 2025

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 Fahrenheit

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 insoluble 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