

### SECTION 1: Identification of the substance/mixture and of the supplier/undertaking

#### 1.1. GHS product identifier

Product form	: Substance
Trade name	: Tetrasodium pyrophosphate
IUPAC name	: Tetrasodium (phosphonatooxy)phosphonate
Substance type	: Mono-constituent
EC-No.	: 231-767-1
CAS-No.	: 7722-88-5
Formula	: Na <sub>4</sub> O <sub>7</sub> P <sub>2</sub>

#### 1.2. Other means of identification

Other means of identification	: Sodium Pyrophosphate TSPP
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#### 1.3. Recommended use of the chemical and restrictions on use

Recommended use	: Industrial uses Laboratory chemicals
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#### 1.4. Supplier's details

##### Distributor

Rolfes Chemicals (Pty) Ltd.  
Cnr Brammer and Strachan Street,  
P.O. Box P.O. Box 14075, Wadeville  
1422 Germiston – South Africa Gauteng  
T 011 873 0157

#### 1.5. Emergency phone number

Emergency number	: 086 111 4753
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### SECTION 2: Hazard identification

#### 2.1. GHS classification of the substance/mixture and any national or regional information

##### Classification according to the United Nations GHS

Acute toxicity (oral), Category 4	H302
Full text of H-statements: see section 16	
Adverse physicochemical, human health and environmental effects	: Harmful if swallowed.

#### 2.2. GHS label elements, including precautionary statements

##### Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA)



Signal word (GHS-ZA)	: Warning
Hazard statements (GHS ZA)	: H302 - Harmful if swallowed
Precautionary statements (GHS ZA)	: P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P301+P317 - IF SWALLOWED: Get medical help. P330 - Rinse mouth. P501 - Dispose of contents and container to an approved waste disposal plant.

# Tetrasodium pyrophosphate

## Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 9

P-statements for label (GHS-ZA) : P264 - Wash hands, forearms and face thoroughly after handling.; P270 - Do not eat, drink or smoke when using this product.; P301+P317 - IF SWALLOWED: Get medical help.; P330 - Rinse mouth.; P501 - Dispose of contents and container to an approved waste disposal plant.

### 2.3. Other hazards which do not result in classification or are not covered by the GHS

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Substance type : Mono-constituent  
Name : Tetrasodium pyrophosphate  
CAS-No. : 7722-88-5  
EC-No. : 231-767-1  
IUPAC name : Tetrasodium (phosphonatooxy)phosphonate  
Product identifiers: See section 1.1

Name	Product identifier	%	Classification according to the United Nations GHS
Tetrasodium pyrophosphate	CAS-No.: 7722-88-5	≤ 95	Acute Tox. 4 (Oral), H302

Full text of H-statements: see section 16

### 3.2. Mixture

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of necessary first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water.  
First-aid measures after eye contact : Rinse eyes with water as a precaution.  
First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

### 4.2. Most important symptoms/effect, acute and delayed

Symptoms/effects after inhalation : Dust of the product, if present, may cause respiratory irritation after excessive inhalation exposure. Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.  
Symptoms/effects after skin contact : None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.  
Symptoms/effects after eye contact : None under normal conditions. Dust from this product may cause eye irritation.  
Symptoms/effects after ingestion : None under normal conditions.

### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.  
Unsuitable extinguishing media : Do not use a heavy water stream.

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### 5.2. Specific hazards arising from the chemical

- Fire hazard : No fire hazard.  
Explosion hazard : No direct explosion hazard.  
Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Special protective actions for fire-fighters

- Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.  
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

#### 6.1.1. For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.  
Emergency procedures : Ventilate spillage area.

#### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".  
Emergency procedures : Evacuate unnecessary personnel.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and materials for containment and cleaning up

- For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.  
Methods for cleaning up : Mechanically recover the product.  
Other information : Dispose of materials or solid residues at an authorized site.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.  
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.  
Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Keep in a cool, well-ventilated place away from heat.  
Storage conditions : Keep cool. Protect from sunlight.  
Packaging materials : Store always product in container of same material as original container.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Tetrasodium pyrophosphate (7722-88-5)

#### South Africa - Occupational Exposure Limits (Restricted Limits)

Local name	Tetrasodium pyrophosphate
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# Tetrasodium pyrophosphate

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Tetrasodium pyrophosphate (7722-88-5)	
RHCA - STEL/C	5 mg/m <sup>3</sup>
Remark	Sk
Regulatory reference	Government Notice. R: 1179
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Tetrasodium pyrophosphate
OEL TWA	5 mg/m <sup>3</sup>
Regulatory reference	Government Notice No. R 904

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures, such as personal protective equipment

Hand protection : Protective gloves  
Eye protection : Safety glasses  
Skin and body protection : Wear suitable protective clothing  
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s)



### 8.4. Exposure limit values for the other components

No additional information available

## SECTION 9: Physical and chemical properties

### 9.1. Basic physical and chemical properties

Physical state : Solid  
Appearance : Powder.  
Colour : No data available  
Odour : No data available  
Odour threshold : No data available  
pH : No data available  
pH solution : No data available  
Relative evaporation rate (butylacetate=1) : No data available  
Relative evaporation rate (ether=1) : No data available  
Melting point : 880 – 988 °C  
Freezing point : Not applicable  
Boiling point : No data available  
Flash point : Not applicable  
Auto-ignition temperature : Not applicable  
Decomposition temperature : No data available  
Flammability : Non flammable.  
Vapour pressure : 0  
Vapour pressure at 50°C : No data available  
Relative vapour density at 20°C : No data available  
Relative density : 2.62  
Relative density of saturated gas/air mixture : No data available  
Density : No data available  
Relative gas density : No data available

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Solubility	: Water: 58.5 g/l
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Physical state	: Solid
Appearance	: Powder.

### 9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical Stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Tetrasodium pyrophosphate (7722-88-5)	
LD50 oral rat	300 – 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method), Guideline: EU Method B.1 bis (Acute Oral Toxicity - Fixed Dose Procedure)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: other., Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified

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Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

### Tetrasodium pyrophosphate (7722-88-5)

NOAEL (oral, rat, 90 days)	500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
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Aspiration hazard	: Not classified
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### Tetrasodium pyrophosphate (7722-88-5)

Viscosity, kinematic	Not applicable
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## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

### Tetrasodium pyrophosphate (7722-88-5)

LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

### 12.2. Persistence and degradability

#### Tetrasodium pyrophosphate (7722-88-5)

Persistence and degradability	Not rapidly degradable
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#### Tetrasodium pyrophosphate (7722-88-5)

Persistence and degradability	
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### 12.3. Bioaccumulative potential

#### Tetrasodium pyrophosphate (7722-88-5)

Bioaccumulative potential	No additional information available
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### 12.4. Mobility in soil

#### Tetrasodium pyrophosphate (7722-88-5)

Mobility in soil	No additional information available
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### 12.5. Other adverse effects

Ozone	: Not classified
Other adverse effects	: No additional information available

# Tetrasodium pyrophosphate

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### SECTION 13: Disposal Considerations

#### 13.1. Disposal methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

### SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
<b>14.1. UN number</b>		
Not regulated for transport		
<b>14.2. UN Proper Shipping Name</b>		
Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
<b>14.4. Packing group, if applicable</b>		
Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
No supplementary information available		

#### 14.6. Special precautions for user

##### SANS

No data available

##### IMDG

No data available

##### IATA

No data available

#### 14.7. Transport in bulk according to IMO instructions

Not applicable

### SECTION 15: Regulatory information

#### 15.1. National regulations

##### 15.1.1. OCCUPATIONAL HEALTH AND SAFETY ACT, 1993

##### Prohibited Hazardous Chemical Agents

Not regulated

#### 15.2. Safety, health, and environmental national regulations specific for the product

No additional information available

# Tetrasodium pyrophosphate

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### SECTION 16: Other information

Issue date : 03/03/2019  
Revision date : 09/10/2024  
Supersedes : 09/10/2024

#### Full text of H-statements:

H302	Harmful if swallowed
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Safety Data Sheet (SDS), South Africa (HCA)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.