

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

### 1.1. GHS product identifier

Product form : Substance  
 Trade name : Tetrapotassium pyrophosphate  
 Substance type : Mono-constituent  
 CAS-No. : 7320-34-5

### 1.2. Other means of identification

No additional information available

### 1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Builder for liquid detergents; dispersant and sequestering agent in water conditioning; dispersant in paints, ceramics, and latex mixes in synthetic rubber manufacture; buffer in electroplating baths, and as a food additive

### 1.4. Supplier's details

#### Distributor

Rolfes Chemicals Pty Ltd  
 Cnr Brammer and strachan street  
 P.O. Box 14075, Wadeville  
 1422 Germiston JHB – South Africa Gauteng  
 South Africa  
 T +27 11 873 0157

### 1.5. Emergency phone number

Emergency number : 0861114753

## 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

H319 Causes serious eye irritation

Full text of H-statements: see section 16

### 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) : H319-Causes serious eye irritation  
 Precautionary statements (GHS ZA) : P264 Wash hands thoroughly after handling.  
 P280 Wear protective gloves / protective clothing / eye protection / face protection.  
 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.

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According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 8

### 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 : Tetrapotassium pyrophosphate  
CAS-No. : 7320-34-5  
Product identifiers: See section 1.1

Name	Product Identifier	%	Classification according to the United Nations GHS
Tetrapotassium pyrophosphate	7320-34-5	95 – 100%	Not classified

## 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. Call a poison center or a doctor if you feel unwell.  
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 : Call a poison center or a doctor if you feel unwell.

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

No additional information available

### 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 : Not combustible, however, if material is involved in a fire use: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Non-combustible material

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

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

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### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid breathing dust, fume, gas, mist, spray, vapours.

### 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".

## 6.2. Environmental precautions

Avoid release to the environment.

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

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 : Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume, gas, mist, spray, vapours.  
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Store in a well-ventilated place. Keep cool.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 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 inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s)



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### 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.
Molecular Formula	: K <sub>4</sub> P <sub>2</sub> O <sub>7</sub>
Colour	: white.
Odour	: odourless.
Odour threshold	: No data available
pH	: 10.0 – 10.8
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available

Relative evaporation rate (ether=1)	: No data available
Melting point	: 1100 °C
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Vapour pressure	: No data available
Vapour pressure at 50°C	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: No data available
Relative density of saturated gas/air mixture	: No data available
Relative gas density	: No data available
Solubility	: Soluble in water
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

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

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

Phosphates are susceptible to formation of highly toxic and flammable phosphine gas in the presence of strong reducing agents such as hydrides.  
Hygroscopic: absorbs moisture or water from surrounding air

### 10.2. Chemical Stability

Stable under normal conditions.

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### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid dust generation. Avoid exposure to moisture.

### 10.5. Incompatible materials

Incompatible with oxidising agents , and reducing agents

### 10.6. Hazardous decomposition products

Oxides of phosphorus

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

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

Tetrapotassium pyrophosphate(7320-34-5)

LD50 dermal rabbit	>4640 mg/kg
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Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

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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 : Not classified  
(acute)

Hazardous to the aquatic environment, long-term : Not classified (chronic)

Tetrapotassium pyrophosphate(7320-34-5)	
EC50 (Daphnia magna)	>100 mg/L (static test)

#### 12.2. Persistence and degradability

Tetrapotassium pyrophosphate(7320-34-5)	
Persistence and degradability	No additional information available

#### 12.3. Bioaccumulative potential

Tetrapotassium pyrophosphate(7320-34-5)	
Bioaccumulative potential	No additional information available

#### 12.4. Mobility in soil

Tetrapotassium pyrophosphate(7320-34-5)	
Mobility in soil	No additional information available

#### 12.5. Other adverse effects

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

## SECTION 13: Disposal Considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## 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. Safety, health and environmental regulations specific for the product in question

No additional information available

## SECTION 16: Other information

Issue date : 31/10/2023

Revision date : 30/10/2023

# Tetra Potassium Pyrophosphate

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Supersedes

: 30/10/2023

Full text of H-statements:	
H319	Causes serious eye irritation

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