

# **SAFETY DATA SHEET**

Creation Date 31-Jan-2012 Revision Date 24-Dec-2021 Revision Number 5

1. Identification

Product Name Potassium phosphate tribasic monohydrate

Cat No.: AC263790000; AC263790010; AC263790050; AC263790250;

AC263790251; AC263795000

**CAS No** 27176-10-9

**Synonyms** Tripotassium phosphate monohydrate; Phosphoric acid, tripotassium salt, monohydrate.

Recommended Use Laboratory chemicals.

**Uses advised against** Food, drug, pesticide or biocidal product use.

### Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
Fair Lawn, NJ 07410

Emergency Telephone Number For information US call: 001-800-ACROS-01 / Europe call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

## 2. Hazard(s) identification

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious Eye Damage/Eye Irritation Specific target organ toxicity (single exposure) Category 1 Category 3

Target Organs - Respiratory system.

Label Elements

**Signal Word** 

Danger

**Hazard Statements** 

Causes serious eye damage
May cause respiratory irritation



## **Precautionary Statements**

#### Prevention

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

#### Eves

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

### Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

### Disposal

Dispose of contents/container to an approved waste disposal plant

### Hazards not otherwise classified (HNOC)

None identified

## 3. Composition/Information on Ingredients

Component	CAS No	Weight %		
Potassium phosphate monohydrate	27176-10-9	>95		
Phosphoric acid, tripotassium salt	7778-53-2	-		

### 4. First-aid measures

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

**Inhalation** Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms and

effects

None reasonably foreseeable. Causes eye burns. . Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate

tissue and danger of perforation

Notes to Physician Treat symptomatically

### 5. Fire-fighting measures

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available No information available Method -

Sensitivity to Static Discharge No information available

**Autoignition Temperature** 

**Explosion Limits** 

Upper

Lower

No data available No data available Sensitivity to Mechanical Impact No information available

No information available

**Specific Hazards Arising from the Chemical** 

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition. Corrosive material. In the event of fire and/or explosion do not breathe fumes.

#### **Hazardous Combustion Products**

Oxides of phosphorus. Phosphorus trihydride (phosphine). Thermal decomposition can lead to release of irritating gases and vapors.

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health **Flammability** Instability Physical hazards N/A 3 0 0

## Accidental release measures

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust **Personal Precautions** 

formation.

Should not be released into the environment. See Section 12 for additional Ecological **Environmental Precautions** 

Information.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed

containers for disposal.

7. Handling and storage

Wear personal protective equipment/face protection. Avoid dust formation. Do not get in Handling eyes, on skin, or on clothing. Ensure adequate ventilation. Avoid ingestion and inhalation.

Storage. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible

Materials. Acids. Strong oxidizing agents.

8. Exposure controls / personal protection

This product does not contain any hazardous materials with occupational exposure **Exposure Guidelines** 

limitsestablished by the region specific regulatory bodies.

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers **Engineering Measures** 

are close to the workstation location.

**Personal Protective Equipment** 

Tight sealing safety goggles. Face protection shield. **Eye/face Protection** 

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

Physical StatePowder SolidAppearanceWhiteOdorOdorless

Odor Threshold No information available

pH Strongly basic 12.5-14
Melting Point/Range 1340 °C / 2444 °F
Boiling Point/Range No information available
Flash Point No information available

Evaporation Rate Not applicable

Flammability (solid,gas) No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information availableVapor DensityNot applicable

Specific Gravity

No information available

Solubility

Partition coefficient; n-octanol/water

Autoignition Tomporature

No data available

No information available

Autoignition TemperatureNo information availableDecomposition TemperatureNo information available

ViscosityNot applicableMolecular FormulaK3 O4 P . H2 OMolecular Weight230.28

## 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under recommended storage conditions.

Conditions to Avoid Incompatible products. Excess heat. Avoid dust formation.

Incompatible Materials Acids, Strong oxidizing agents

Hazardous Decomposition Products Oxides of phosphorus, Phosphorus trihydride (phosphine), Thermal decomposition can lead

to release of irritating gases and vapors

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity** 

#### **Product Information**

**Component Information** 

Component LD50 Oral		LD50 Dermal	LC50 Inhalation	
Phosphoric acid, tripotassium salt	>2000 mg/kg (Rat)	>4640 mg/kg (Rabbit)	Not listed	

Toxicologically Synergistic No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Causes severe burns by all exposure routes

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Potassium phosphate	27176-10-9	Not listed				
monohydrate						
Phosphoric acid,	7778-53-2	Not listed				
tripotassium salt						

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

No information available. **Developmental Effects** 

**Teratogenicity** No information available.

STOT - single exposure Respiratory system STOT - repeated exposure None known

**Aspiration hazard** No information available

delayed

Symptoms / effects,both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes

severe swelling, severe damage to the delicate tissue and danger of perforation

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity** 

Do not empty into drains.

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

Will likely be mobile in the environment due to its water solubility. **Mobility** 

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

Not regulated DOT Not regulated TDG Not regulated IATA IMDG/IMO Not regulated

## 15. Regulatory information

### **United States of America Inventory**

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags	
Potassium phosphate	27176-10-9	-	-	-	

### Potassium phosphate tribasic monohydrate

monohydrate				
Phosphoric acid, tripotassium salt	7778-53-2	X	ACTIVE	-

#### Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed '-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

### **International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Potassium phosphate	27176-10-9	-	-	-	Х	-		-	-	-
monohydrate										
Phosphoric acid, tripotassium salt	7778-53-2	Х	-	231-907-1	Χ	Χ	Χ	Х	Х	KE-34771

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

## U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

**OSHA** - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Not applicable

## **U.S. Department of Transportation**

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Potassium phosphate monohydrate	27176-10-9	Not applicable	Not applicable	Not applicable	Not applicable
Phosphoric acid, tripotassium salt	7778-53-2	Listed	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Potassium phosphate monohydrate	27176-10-9	Not applicable	Not applicable	Not applicable	Not applicable
Phosphoric acid, tripotassium salt	7778-53-2	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

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Revision Summary

This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**