

## SAFETY DATA SHEET

Creation Date 21-Feb-2012

Revision Date 24-Dec-2021

Revision Number 6

### 1. Identification

**Product Name** Potassium Phosphate Tribasic (Certified)

**Cat No. :** P289-500

**CAS No** 7778-53-2  
**Synonyms** tri-Potassium phosphate

**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

**Emergency Telephone Number** CHEMTREC®, Inside the USA: 800-424-9300  
CHEMTREC®, Outside the USA: 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 Category 1  
Specific target organ toxicity (single exposure) Category 3  
Target Organs - Respiratory system.

#### Label Elements

**Signal Word**  
Danger

**Hazard Statements**  
Causes serious eye damage  
May cause respiratory irritation

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#### **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

##### **Eyes**

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 % |
|------------------------------------|-----------|----------|
| Phosphoric acid, tripotassium salt | 7778-53-2 | >95      |

### 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. If skin irritation persists, call a physician.

#### **Inhalation**

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

#### **Ingestion**

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

#### **Most important symptoms and effects**

. 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  
Treat symptomatically

#### **Notes to Physician**

### 5. Fire-fighting measures

#### **Unsuitable Extinguishing Media**

No information available

|   |                          |
|---|--------------------------|
| <b>Flash Point</b>                      | No information available |
| <b>Method -</b>                         | No information available |
| <b>Autoignition Temperature</b>         | No information available |
| <b>Explosion Limits</b>                 |                          |
| <b>Upper</b>                            | No data available        |
| <b>Lower</b>                            | No data available        |
| <b>Sensitivity to Mechanical Impact</b> | No information available |
| <b>Sensitivity to Static Discharge</b>  | No information available |

**Specific Hazards Arising from the Chemical**

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

**Hazardous Combustion Products**

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**

|               |                     |                    |                         |
|---------------|---------------------|--------------------|-------------------------|
| <b>Health</b> | <b>Flammability</b> | <b>Instability</b> | <b>Physical hazards</b> |
| 3             | 0                   | 0                  | N/A                     |

**6. Accidental release measures**

|                                  |   |
|----------------------------------|---|
| <b>Personal Precautions</b>      | Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation. |
| <b>Environmental Precautions</b> | Should not be released into the environment.  |

|   |  |
|---|--|
| <b>Methods for Containment and Clean Up</b> | Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal. |
|---|--|

**7. Handling and storage**

|                 |   |
|-----------------|---|
| <b>Handling</b> | Wear personal protective equipment/face protection. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Ensure adequate ventilation. Avoid ingestion and inhalation. |
| <b>Storage.</b> | Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Strong oxidizing agents.   |

**8. Exposure controls / personal protection**

|                            |   |
|----------------------------|---|
| <b>Exposure Guidelines</b> | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
|----------------------------|---|

|                             |   |
|-----------------------------|---|
| <b>Engineering Measures</b> | Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. |
|-----------------------------|---|

**Personal Protective Equipment**

|                                 |   |
|---------------------------------|---|
| <b>Eye/face Protection</b>      | Tight sealing safety goggles. Face protection shield.   |
| <b>Skin and body protection</b> | Wear appropriate protective gloves and clothing to prevent skin exposure.   |
| <b>Respiratory Protection</b>   | 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. |

|                         |  |
|-------------------------|--|
| <b>Hygiene Measures</b> | Handle in accordance with good industrial hygiene and safety practice. |
|-------------------------|--|

**9. Physical and chemical properties**

|   |                                |
|---|--------------------------------|
| <b>Physical State</b>                         | Solid                          |
| <b>Appearance</b>                             | White                          |
| <b>Odor</b>                                   | Odorless                       |
| <b>Odor Threshold</b>                         | No information available       |
| <b>pH</b>                                     | 11,5-12 @ 20°C (10 g/l aq.sol) |
| <b>Melting Point/Range</b>                    | 1340 °C / 2444 °F              |
| <b>Boiling Point/Range</b>                    | No information available       |
| <b>Flash Point</b>                            | No information available       |
| <b>Evaporation Rate</b>                       | Not applicable                 |
| <b>Flammability (solid,gas)</b>               | No information available       |
| <b>Flammability or explosive limits</b>       |                                |
| <b>Upper</b>                                  | No data available              |
| <b>Lower</b>                                  | No data available              |
| <b>Vapor Pressure</b>                         | No information available       |
| <b>Vapor Density</b>                          | Not applicable                 |
| <b>Specific Gravity</b>                       | No information available       |
| <b>Solubility</b>                             | Soluble in water               |
| <b>Partition coefficient; n-octanol/water</b> | No data available              |
| <b>Autoignition Temperature</b>               | No information available       |
| <b>Decomposition Temperature</b>              | No information available       |
| <b>Viscosity</b>                              | Not applicable                 |
| <b>Molecular Formula</b>                      | K3 O4 P                        |
| <b>Molecular Weight</b>                       | 212.27                         |

**10. Stability and reactivity**

|   |  |
|---|--|
| <b>Reactive Hazard</b>                  | None known, based on information available                               |
| <b>Stability</b>                        | Stable under normal conditions.  |
| <b>Conditions to Avoid</b>              | Avoid dust formation. Incompatible products. Excess heat.                |
| <b>Incompatible Materials</b>           | Strong oxidizing agents  |
| <b>Hazardous Decomposition Products</b> | Thermal decomposition can lead to release of irritating gases and vapors |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.                                 |
| <b>Hazardous Reactions</b>              | None under normal processing.  |

**11. Toxicological information****Acute Toxicity****Product 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**

|                      |                          |
|----------------------|--------------------------|
| <b>Irritation</b>    | Causes eye burns         |
| <b>Sensitization</b> | No information available |

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|   |  |            |            |            |            |            |
|---|--|------------|------------|------------|------------|------------|
| Carcinogenicity                           | The table below indicates whether each agency has listed any ingredient as a carcinogen.   |            |            |            |            |            |
| Component                                 | CAS No   | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
| Phosphoric acid, tripotassium salt        | 7778-53-2  | Not listed | Not listed | Not listed | Not listed | Not listed |
| Mutagenic Effects                         | No information available   |            |            |            |            |            |
| Reproductive Effects                      | No information available.  |            |            |            |            |            |
| Developmental Effects                     | No information available.  |            |            |            |            |            |
| Teratogenicity                            | No information available.  |            |            |            |            |            |
| STOT - single exposure                    | Respiratory system   |            |            |            |            |            |
| STOT - repeated exposure                  | None known   |            |            |            |            |            |
| Aspiration hazard                         | No information available   |            |            |            |            |            |
| Symptoms / effects,both acute and delayed | 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.  |  |  |  |  |  |
| Mobility                      | Will likely be mobile in the environment due to its water solubility.    |  |  |  |  |  |

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

|          |               |
|----------|---------------|
| DOT      | Not regulated |
| TDG      | Not regulated |
| IATA     | Not regulated |
| 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 |
| 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

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|                                |                |
|--------------------------------|----------------|
| 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     |
| Phosphoric acid, tripotassium salt | 7778-53-2 | X   | -    | 231-907-1 | X     | X    | X    | X    | X     | 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) |
| 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 | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|-----------|--------|--|---|----------------------------|------------------------------------|

|                                    |           | Notification   | Requirements   |                |                |
|------------------------------------|-----------|----------------|----------------|----------------|----------------|
| Phosphoric acid, tripotassium salt | 7778-53-2 | Not applicable | Not applicable | Not applicable | Not applicable |

16. Other information

|                  |   |
|------------------|---|
| Prepared By      | Regulatory Affairs<br>Thermo Fisher Scientific<br>Email: EMSDS.RA@thermofisher.com  |
| Creation Date    | 21-Feb-2012   |
| Revision Date    | 24-Dec-2021   |
| Print Date       | 24-Dec-2021   |
| 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