# SAFETY DATA SHEET

**Creation Date** 16-May-2008 **Revision Date** 18-Dec-2025 **Revision Number** 6

**This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)**

## 1. Identification

**Product Name** **Triphenyl phosphate**

**Cat No. :** **AC147670000; AC147670010; AC147670025; AC147670050; AC147672500**

**CAS No** 115-86-6
**Synonyms** No information available

**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

**Emergency Telephone Number**
For information **US** call: 001-800-227-6701 / **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 according to [US] OSHA (29 CFR 1910.1200, 2024)

| | |
|---|---|
| Specific target organ toxicity - (repeated exposure)<br>Target Organs - Blood. | Category 2 |

**Label Elements**

**Signal Word**
Warning

**Hazard Statements**
May cause damage to organs through prolonged or repeated exposure



**Precautionary Statements**
**Prevention**
Do not breathe dust/fume/gas/mist/vapors/spray
**Response**
Get medical attention/advice if you feel unwell
**Disposal**
Dispose of contents/container to an approved waste disposal plant
**Hazards not otherwise classified (HNOC)**
Very toxic to aquatic life with long lasting effects

**Hazards classified under paragraph (d)(1)(ii) of 1910.1200**
No information available
**Other hazards**
Contains a known or suspected endocrine disruptor.

## 3. Composition/information on Ingredients

| Component | CAS No | Weight % |
|---|---|---|
| Triphenyl phosphate | 115-86-6 | <=100 |

## 4. First-aid measures

**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 if symptoms occur.

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

**Ingestion** Do NOT induce vomiting. Get medical attention.

**Most important symptoms and effects** None reasonably foreseeable.

**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

**Unsuitable Extinguishing Media** No information available

**Flash Point** 220 °C / 428 °F

**Method -** No information available

**Autoignition Temperature** 500 °C / 932 °F

**Explosion Limits**

| | |
|---|---|
| **Upper** | No data available |
| **Lower** | No data available |
| **Sensitivity to Mechanical Impact** | No information available |
| **Sensitivity to Static Discharge** | 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. Do not allow run-off from fire-fighting to enter drains or water courses.

**Hazardous Combustion Products**
Carbon monoxide (CO). Carbon dioxide ($CO_2$). Oxides of phosphorus. Phosphorus trihydride (phosphine).
**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 |
|---|---|---|---|
| 1 | 1 | 0 | N/A |

## 6. Accidental release measures

**Personal Precautions** Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes or clothing.

**Environmental Precautions** Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

**Methods for Containment and Clean Up** Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

## 7. Handling and Storage

**Handling** Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation.

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

## 8. Exposure controls / personal protection

**Exposure Guidelines**

| Component | ACGIH TLV | OSHA PEL | NIOSH | Mexico OEL (TWA) |
|---|---|---|---|---|
| Triphenyl phosphate | TWA: 3 mg/m³ | (Vacated) TWA: 3 mg/m³<br>TWA: 3 mg/m³ | IDLH: 1000 mg/m³<br>REL = 3 mg/m³ (TWA) | TWA: 3 mg/m³ |

*Legend*

*ACGIH - American Conference of Governmental Industrial Hygienists*
*OSHA - Occupational Safety and Health Administration*
*NIOSH: NIOSH - National Institute for Occupational Safety and Health*

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment**

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

**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.

**Recommended Filter type:** Particulates filter conforming to EN 143.

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

## 9. Physical and chemical properties

**Appearance**

| | | | |
|---|---|---|---|
| **Physical State** | Solid | | |
| **Color** | White | | |
| **Odor** | Odorless | | |
| **Odor Threshold** | No information available | | |
| **Property** | **Values** | **Remarks** | **• Method** |
| **Melting Point/Range** | 47 - 53 °C / 116.6 - 127.4 °F | | |
| **Softening Point** | No data available | | |
| **Boiling Point/Range** | 370 °C / 698 °F | | |
| **Flash Point** | 220 °C / 428 °F | **Method -** No information available | |
| **Flammability (liquid)** | Not applicable | Solid | |
| **Flammability (solid,gas)** | No information available | | |
| **Explosion Limits** | No data available | | |
| **Autoignition Temperature** | 500 °C / 932 °F | | |
| **Decomposition Temperature** | > 250°C | | |
| **pH** | No information available | | |
| **Viscosity** | Not applicable | Solid | |
| **Water Solubility** | Insoluble | | |
| **Solubility in other solvents** | No information available | | |

**Partition Coefficient (n-octanol/water)**

| **Component** | **log Pow** |
|---|---|
| Triphenyl phosphate | 4.63 |

| | | | |
|---|---|---|---|
| **Vapor Pressure** | 1.3 hPa @ 193 °C | | |
| **Density / Specific Gravity** | 1.3 | | |
| **Bulk Density** | No data available | | |
| **Vapor Density** | Not applicable | Solid | |
| **Particle characteristics** | No data available | | |

**Other Information**

| | |
|---|---|
| **Molecular Formula** | C18 H15 O4 P |
| **Molecular Weight** | 326.28 |
| **Evaporation Rate** | Not applicable - Solid |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions.

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

**Incompatible Materials** Oxidizing agent

**Hazardous Decomposition Products** Carbon monoxide (CO), Carbon dioxide ($CO_2$), Oxides of phosphorus, Phosphorus trihydride (phosphine)

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Information on expected route of exposure**

**Inhalation** Not an expected route of exposure.
**Ingestion** May be harmful if swallowed.
**Eyes** Avoid contact with eyes.
**Skin** Avoid contact with skin.

**Toxicology data for the components**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Triphenyl phosphate | LD50 = 3500 mg/kg ( Rat ) | LD50 > 10000 mg/kg ( Rabbit ) | LC50 > 200000 mg/m³ ( Rat ) 1 h |

**Toxicologically Synergistic Products** No information available

**(b) skin corrosion/irritation;** No data available

**(c) serious eye damage/irritation;** No data available

**(d) respiratory or skin sensitization;**
**Respiratory** No data available
**Skin** No data available

**(e) germ cell mutagenicity;** No data available

**(f) carcinogenicity;**

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

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Triphenyl phosphate | 115-86-6 | Not listed | Not listed | Not listed | Not listed | Not listed |

**(g) reproductive toxicity;** No data available

**(h) STOT-single exposure;** No data available

**(i) STOT-repeated exposure;** No data available

**Target Organs** No information available.

**(j) aspiration hazard;** Not applicable
Solid

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

**Symptoms / effects,both acute and delayed** No information available.

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

**Endocrine Disrupting Properties** .
**Assess endocrine disrupting properties for human health** Contains a substance on the National Authorities Endocrine Disruptor Lists

| Component | EU National Authorities Endocrine Disruptor Lists - Health |
|---|---|
| Triphenyl phosphate<br>115-86-6 ( <=100 ) | List II |

## 12. Ecological information

**Ecotoxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---|---|---|---|---|
| Triphenyl phosphate | EC50: 0.6 - 4 mg/L, 96h static (Pseudokirchneriella subcapitata) | 1.2 mg/L LC50 96h<br>0.47 - 1.04 mg/L LC50 96h<br>0.53 - 0.8 mg/L LC50 96h<br>0.81 - 0.94 mg/L LC50 96h<br>0.28 - 0.5 mg/L LC50 96h | Not listed | EC50: 0.86 - 1.2 mg/L, 48h (Daphnia magna) |

**Persistence and Degradability** Persistence is unlikely

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Is not likely mobile in the environment due its low water solubility.

| Component | log Pow |
|---|---|
| Triphenyl phosphate | 4.63 |

## 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**

**UN-No** UN3077
**Proper Shipping Name** Environmentally hazardous substances, solid, n.o.s.
**Technical Shipping Name** Triphenyl phosphate
**Hazard Class** 9
**Packing Group** III

**TDG**

**UN-No** UN3077
**Proper Shipping Name** Environmentally hazardous substances, solid, n.o.s.
**Technical Shipping Name** Triphenyl phosphate
**Hazard Class** 9
**Packing Group** III

**IATA**

**UN-No** UN3077
**Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.*
**Technical Shipping Name** Triphenyl phosphate

| | |
|---|---|
| **Hazard Class** | 9 |
| **Packing Group** | III |

**IMDG/IMO**

| | |
|---|---|
| **UN-No** | UN3077 |
| **Proper Shipping Name** | ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S. |
| **Technical Shipping Name** | Triphenyl phosphate |
| **Hazard Class** | 9 |
| **Packing Group** | III |

## 15. Regulatory Information

**United States of America Inventory**

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|---|---|---|---|---|
| Triphenyl phosphate | 115-86-6 | X | ACTIVE | T;TP |

**Legend:**
**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed
TP - Indicates a substance that is the subject of a proposed TSCA Section 4 test rule

**TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)** Not applicable

**TSCA 12(b)** - Notices of Export Not applicable

| Component | CAS No | **TSCA 12(b)** - Notices of Export |
|---|---|---|
| Triphenyl phosphate | 115-86-6 | Section 5(a)(2)<br>Section 4 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| Triphenyl phosphate | 115-86-6 | X | - | 204-112-2 | X | X | X | X | X | KE-34739 |

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

**U.S. Federal Regulations**

**SARA 313**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)** Not applicable

**Clean Air Act** Not applicable

**OSHA** - Occupational Safety and Health Administration Not applicable

**CERCLA**
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive

Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

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

**U.S. State Right-to-Know Regulations**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Triphenyl phosphate | X | X | X | - | X |

**U.S. Department of Transportation**
Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant Y

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** Slight risk, Grade 1

**Authorisation/Restrictions according to EU REACH** Not applicable

| Component | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|---|---|---|---|---|
| Triphenyl phosphate | 115-86-6 | - | - | SVHC Candidate list - 204-112-2 - Endocrine disrupting properties (Article 57(f) - environment) |

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

**REACH links**
*https://echa.europa.eu/authorisation-list*
*https://echa.europa.eu/candidate-list-table*

**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) |
|---|---|---|---|---|---|
| Triphenyl phosphate | 115-86-6 | Listed | Not applicable | Not applicable | Not applicable |

**Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?**
Not applicable

**Other International Regulations**

| Component | CAS No | Seveso III Directive | Seveso III Directive | Rotterdam | Basel Convention |
|---|---|---|---|---|---|

| | | (2012/18/EC) - Qualifying Quantities for Major Accident Notification | (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Convention (PIC) | (Hazardous Waste) |
|---|---|---|---|---|---|
| Triphenyl phosphate | 115-86-6 | Not applicable | Not applicable | Not applicable | Not applicable |

## 16. Other Information

**Prepared By**
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**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**