# SAFETY DATA SHEET

**Revision Date** 24-Dec-2025 **Revision Number** 4

**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** **Diphenyl methylphenyl phosphate, mixture of isomers**

**Cat No. :** **42092**

**CAS No** 26444-49-5
**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**
Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757

**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)

| | |
|---|---|
| Acute oral toxicity | Category 4 |

**Label Elements**

**Signal Word**
Warning

**Hazard Statements**
Harmful if swallowed



**Precautionary Statements**
**Prevention**
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
**Ingestion**
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
**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

## 3. Composition/information on Ingredients

| Component | CAS No | Weight % |
|---|---|---|
| Phosphoric acid, methylphenyl diphenyl ester | 26444-49-5 | <=100 |

## 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.

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

**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Carbon dioxide ($CO_2$). Powder. Water spray. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

**Unsuitable Extinguishing Media** No information available

**Flash Point** 232 °C / 449.6 °F

| | |
|---|---|
| **Method -** | No information available |
| **Autoignition Temperature** | No information available |
| **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**
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.
**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 |
|---|---|---|---|
| 2 | 1 | 0 | - |

## 6. Accidental release measures

| | |
|---|---|
| **Personal Precautions** | Ensure adequate ventilation. Use personal protective equipment as required. |
| **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** | Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. |

## 7. Handling and Storage

| | |
|---|---|
| **Handling** | Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Do not get in eyes, on skin, or on clothing. |
| **Storage.** | Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Oxidizing agent. |

## 8. Exposure controls / personal protection

| | |
|---|---|
| **Exposure Guidelines** | This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies. |
| **Engineering Measures** | None under normal use conditions. |

**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** | No protective equipment is needed under normal use conditions. |
| **Recommended Filter type:** | Particle filter. |

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

## 9. Physical and chemical properties

**Appearance**

| | | | |
|---|---|---|---|
| **Physical State** | Liquid | | |
| **Color** | Light yellow | | |
| **Odor** | No information available | | |
| **Odor Threshold** | No information available | | |
| **Property** | **Values** | **Remarks** | **• Method** |
| **Melting Point/Range** | -38 °C / -36.4 °F | | |
| **Softening Point** | No data available | | |
| **Boiling Point/Range** | 390 °C / 734 °F | | |
| **Flash Point** | 232 °C / 449.6 °F | **Method -** No information available | |
| **Flammability (liquid)** | No data available | | |
| **Flammability (solid,gas)** | Not applicable | Liquid | |
| **Explosion Limits** | No data available | | |
| **Autoignition Temperature** | No data available | | |
| **Decomposition Temperature** | No data available | | |
| **pH** | No information available | | |
| **Viscosity** | No data available | | |
| **Water Solubility** | Immiscible | | |
| **Solubility in other solvents** | No information available | | |
| **Partition Coefficient (n-octanol/water)** | | | |
| **Component** | **log Pow** | | |
| Phosphoric acid, methylphenyl diphenyl ester | 4.5 | | |
| **Vapor Pressure** | No data available | | |
| **Density / Specific Gravity** | 1.21 g/cm3 | @ 20 °C | |
| **Bulk Density** | Not applicable | Liquid | |
| **Vapor Density** | No data available | (Air = 1.0) | |
| **Particle characteristics** | Not applicable (liquid) | | |

**Other Information**

**Molecular Formula** (CH3 C6 H4 O)x P(O)(OC6 H5)y

## 10. Stability and reactivity

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

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products.

**Incompatible Materials** Oxidizing agent

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

**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 |
|---|---|---|---|
| Phosphoric acid, methylphenyl diphenyl ester | LD50 = 1420 mg/kg ( Rat ) | LD50 > 2000 mg/kg ( Rabbit ) | - |

**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 |
|---|---|---|---|---|---|---|
| Phosphoric acid, methylphenyl diphenyl ester | 26444-49-5 | 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;** No data available

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

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

**Endocrine Disrupting Properties** This product does not contain any known or suspected endocrine disruptors.

## 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.

**Persistence and Degradability** May persist

**Bioaccumulation/ Accumulation** No information available.

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

| Component | log Pow |
|---|---|
| Phosphoric acid, methylphenyl diphenyl ester | 4.5 |

## 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** UN3082
**Proper Shipping Name** Environmentally hazardous substances, liquid, n.o.s.
**Technical Shipping Name** (Diphenyl methylphenyl phosphate, mixture of isomers)
**Hazard Class** 9
**Packing Group** III

**TDG**

**UN-No** UN3082
**Proper Shipping Name** Environmentally hazardous substances, liquid, n.o.s.
**Technical Shipping Name** (Diphenyl methylphenyl phosphate, mixture of isomers)
**Hazard Class** 9
**Packing Group** III

**IATA**

**UN-No** UN3082
**Proper Shipping Name** Environmentally hazardous substances, liquid, n.o.s.
**Technical Shipping Name** (Diphenyl methylphenyl phosphate, mixture of isomers)
**Hazard Class** 9
**Packing Group** III

**IMDG/IMO**

**UN-No** UN3082
**Proper Shipping Name** Environmentally hazardous substances, liquid, n.o.s.
**Technical Shipping Name** (Diphenyl methylphenyl phosphate, mixture of isomers)
**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 |
|---|---|---|---|---|
| Phosphoric acid, methylphenyl diphenyl ester | 26444-49-5 | X | ACTIVE | - |

**Legend:**
**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed

**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

**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, methylphenyl diphenyl ester | 26444-49-5 | X | - | 247-693-8 | X | X | X | X | X | KE-28599 |

**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** Not applicable

**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** No information available

**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 | REACH Regulation (EC 1907/2006) article 59 - Candidate List of |
|---|---|---|---|---|

| | | | Substances | Substances of Very High Concern (SVHC) |
|---|---|---|---|---|
| Phosphoric acid, methylphenyl diphenyl ester | 26444-49-5 | - | - | - |

**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, methylphenyl diphenyl ester | 26444-49-5 | 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 (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) |
|---|---|---|---|---|---|
| Phosphoric acid, methylphenyl diphenyl ester | 26444-49-5 | Not applicable | Not applicable | Not applicable | Not applicable |

## 16. Other Information

**Prepared By**
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**Print Date** 24-Dec-2025
**Revision Summary** Updated to the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200, 2024), May 20, 2024, effective July 19, 2024.

**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**