



# SAFETY DATA SHEET

## MATERION

### 1. Identification

**Product identifier** Phosphorus Oxide (P2O5)

**Other means of identification**

SDS number 1YX

Materion Code 1YX

CAS number 1314-56-3

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company name** Materion Advanced Chemicals Inc.

**Address** 407 N 13th Street  
1316 W. St. Paul Avenue  
Milwaukee, WI 53233  
United States

**Telephone** 414.212.0257

**E-mail** advancedmaterials@materion.com

**Contact person** Noreen Atkinson

**Emergency phone number** Chemtrec 800.424.9300

### 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Acute toxicity, inhalation Category 2  
Skin corrosion/irritation Category 1A  
Serious eye damage/eye irritation Category 1

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** Not available.

**Precautionary statement**

**Prevention** Not available.

**Response** Not available.

**Storage** Not available.

**Disposal** Not available.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

### 3. Composition/information on ingredients

#### Substances

Chemical name	Common name and synonyms	CAS number	%
Phosphorus Oxide		1314-56-3	90 - 100

### 4. First-aid measures

**Inhalation** Not available.

<b>Skin contact</b>	Not available.
<b>Eye contact</b>	Not available.
<b>Ingestion</b>	Not available.
<b>Most important symptoms/effects, acute and delayed</b>	Not available.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Not available.
<b>Unsuitable extinguishing media</b>	Not available.
<b>Specific hazards arising from the chemical</b>	Not applicable.
<b>Special protective equipment and precautions for firefighters</b>	Not available.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Not available.
<b>Methods and materials for containment and cleaning up</b>	Not available.
<b>Environmental precautions</b>	Not available.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Not available.
<b>Conditions for safe storage, including any incompatibilities</b>	Not available.

## 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Not available.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Not available.
<b>Skin protection</b>	
<b>Hand protection</b>	Not available.
<b>Other</b>	Not available.
<b>Respiratory protection</b>	Not available.
<b>Thermal hazards</b>	Not available.

## 9. Physical and chemical properties

<b>Appearance</b>	
<b>Physical state</b>	Solid.
<b>Form</b>	Not available.
<b>Color</b>	Not available.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	1043.6 °F (562 °C)
<b>Initial boiling point and boiling range</b>	Not available.

Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
<b>Upper/lower flammability or explosive limits</b>	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 0.0000001 kPa at 25 °C
Vapor density	Not available.
Relative density	Not available.
<b>Solubility(ies)</b>	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
<b>Other information</b>	
Density	2.30 g/cm <sup>3</sup> estimated
Molecular formula	P <sub>4</sub> O <sub>10</sub>
Molecular weight	141.94 g/mol
Specific gravity	2.3

## 10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Not available.
Possibility of hazardous reactions	Not available.
Conditions to avoid	Not available.
Incompatible materials	Not available.
Hazardous decomposition products	Not available.

## 11. Toxicological information

### Information on likely routes of exposure

Inhalation	Not available.
Skin contact	Not available.
Eye contact	Not available.
Ingestion	Not available.

Symptoms related to the physical, chemical and toxicological characteristics Not available.

### Information on toxicological effects

Acute toxicity	
Skin corrosion/irritation	Not available.

Serious eye damage/eye irritation	Not available.
Respiratory or skin sensitization	
Respiratory sensitization	Not available.
Skin sensitization	Not available.
Germ cell mutagenicity	Not available.

#### Carcinogenicity

##### IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

##### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

##### US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity	Not available.
Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	Not available.
Aspiration hazard	Not available.

## 12. Ecological information

Ecotoxicity	No ecotoxicity data noted for the ingredient(s).
Persistence and degradability	Not available.
Bioaccumulative potential	Not available.
Mobility in soil	Not available.
Other adverse effects	Not available.

## 13. Disposal considerations

Disposal instructions	Not available.
Waste from residues / unused products	Not available.
Contaminated packaging	Not available.

## 14. Transport information

### DOT

UN number	UN1807
UN proper shipping name	Phosphorus pentoxide
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Label(s)	8
Packing group	II
Special precautions for user	Not available.
Special provisions	A7, IB8, IP2, IP4, N34, T3, TP33
Packaging exceptions	154
Packaging non bulk	212
Packaging bulk	240

### IATA

UN number	UN1807
UN proper shipping name	Phosphorus pentoxide
Transport hazard class(es)	
Class	8

Subsidiary risk	-
Packing group	II
Environmental hazards	No.
ERG Code	8W
Special precautions for user	Not available.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

#### IMDG

UN number	UN1807
UN proper shipping name	PHOSPHORUS PENTOXIDE
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
Special precautions for user	Not available.

#### DOT



#### IATA; IMDG



## 15. Regulatory information

### US federal regulations

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

