

Revision Date 06-Nov-2010

Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**

**Product Description:** Phenyl dichlorophosphate  
**Cat No.** 130480000; 130480250  
**Synonyms** Phenyl phosphorodichloridate

**Relevant identified uses of the substance or mixture and uses advised against**

**Recommended Use** Laboratory chemicals  
**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**

Acros Organics BVBA  
 Janssen Pharmaceuticaaan 3a  
 2440 Geel, Belgium

**E-mail address** begel.sdsdesk@thermofisher.com

**Emergency Telephone Number**

For information in the US, call: 800-ACROS-01  
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99  
 Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300  
 CHEMTREC Phone Number, Europe: 703-527-3887

## 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

**REGULATION (EC) No 1272/2008**

Acute oral toxicity	Category 4
Skin Corrosion / irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

For the full text of the R phrases mentioned in this Section, see Section 16

**Symbol(s)**

C - Corrosive

**R -phrase(s)**

R14 - Reacts violently with water  
 R22 - Harmful if swallowed  
 R29 - Contact with water liberates toxic gas  
 R34 - Causes burns

## 2. HAZARDS IDENTIFICATION

### Label Elements



**Signal Word**

**Danger**

### Hazard Statements

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H302 - Harmful if swallowed

EUH029 - Contact with water liberates toxic gas

EUH014 - Reacts violently with water

### Precautionary Statements - EU (§28, 1272/2008)

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P280 - Wear eye protection/face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

P402 + P404 - Store in a dry place. Store in a closed container

P301+ P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

### Other Hazards

No information available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCAS	REACH Reg. No.
Phosphorodichloridic acid, phenyl ester	EEC No. 212-220-6	99	770-12-7	R14 Xn; R22 R29 C; R34	Skin Corr. 1B (H314) Acute Tox. 4 (H302) (EUH014) (EUH029)	

For the full text of the R phrases mentioned in this Section, see Section 16

## 4. FIRST AID MEASURES

### Description of first aid measures

#### Eye Contact

Immediate medical attention is required Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes

#### Skin Contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes Immediate medical attention is required

<b>Ingestion</b>	Do not induce vomiting Never give anything by mouth to an unconscious person Drink plenty of water Call a physician immediately If possible drink milk afterwards
<b>Inhalation</b>	Remove from exposure, lie down Move to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration Immediate medical attention is required
<b>Notes to Physician</b>	Treat symptomatically

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

#### **Suitable Extinguishing Media**

Carbon dioxide (CO<sub>2</sub>) Dry chemical

#### **Extinguishing media which must not be used for safety reasons**

Water Foam

### Special hazards arising from the substance or mixture

Contact with water liberates toxic gas Water reactive Produce flammable gases on contact with water

### Advice for fire-fighters

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

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

### Environmental precautions

Prevent further leakage or spillage if safe to do so

### Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust) Keep in suitable and closed containers for disposal Wear self-contained breathing apparatus and protective suit

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Do not breathe dust Do not breathe vapors or spray mist Do not get in eyes, on skin, or on clothing Use only in area provided with appropriate exhaust ventilation Keep under nitrogen

### Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place Keep container tightly closed Protect from moisture Corrosives area

### Specific End Uses

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

#### **Exposure limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Derived No Effect Level (DNEL)</b>	No information available.
<b>Predicted No Effect Concentration (PNEC)</b>	No information available.
<b>Exposure controls</b>	
<b>Engineering Measures</b>	Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and safety showers are close to the workstation location
<b>Personal protective equipment</b>	
<b>Eye Protection</b>	Goggles
<b>Hand Protection</b>	Protective gloves
<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
<b>Environmental exposure controls</b>	No information available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Liquid
<b>Appearance</b>	Light brown
<b>odor</b>	odorless
<b>pH</b>	No information available.
<b>Vapor Pressure</b>	No information available.
<b>Vapor Density</b>	7.28
<b>Boiling Point/Range</b>	241 - 243°C / 465.8 - 469.4°F @ 760 mmHg
<b>Melting Point/Range</b>	-1°C / 30.2°F
<b>Flash Point</b>	> 110°C / > 230°F
<b>Water Solubility</b>	Decomposes
<b>Specific Gravity</b>	1.412
<b>Molecular Formula</b>	C6 H5 Cl2 O2 P
<b>Molecular Weight</b>	210.98

## 10. STABILITY AND REACTIVITY

**Reactivity****Chemical Stability**

Stable under normal conditions.

**Possibility of Hazardous Reactions****Hazardous Polymerization**

No information available.

**Hazardous Reactions .**

No information available.

**Conditions to Avoid**

Incompatible products, Exposure to moist air or water.

**Incompatible Materials**

Strong oxidizing agents, Strong bases, Alcohols.

**Hazardous Decomposition Products**Hydrogen chloride gas. Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Oxides of phosphorus. Phosphorus trihydride (phosphine).

## 11. TOXICOLOGICAL INFORMATION

**Information on Toxicological Effects**

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

**Product Information** No acute toxicity information is available for this product

### **Component Information**

### Chronic Toxicity

**Carcinogenicity** There are no known carcinogenic chemicals in this product

### **Sensitization**

No information available.

### **Mutagenic Effects**

No information available

### **Reproductive Effects**

No information available.

### **Developmental Effects**

No information available.

### **Target Organs**

No information available.

### **Other Adverse Effects**

The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information

### **Endocrine Disruptor Information**

None known

## 12. ECOLOGICAL INFORMATION

### Toxicity

#### **Ecotoxicity effects**

Do not flush into surface water or sanitary sewer system Do not allow material to contaminate ground water system

### Persistence and degradability

No information available

### Bioaccumulative potential

No information available.

### Mobility in soil

No information available.

### Results of PBT and vPvB assessment

### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### **Waste from Residues / Unused Products**

Dispose of in accordance with local regulations

#### **Contaminated Packaging**

Empty containers should be taken for local recycling, recovery or waste disposal

## 14. TRANSPORT INFORMATION

### IMDG/IMO

**UN-No**

3265

**Hazard Class**

8

## 14. TRANSPORT INFORMATION

**Packing Group** II  
**Proper Shipping Name** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

### ADR

**UN-No** 3265  
**Hazard Class** 8  
**Packing Group** II  
**Proper Shipping Name** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

### IATA

**UN-No** 3265  
**Hazard Class** 8  
**Packing Group** II  
**Proper Shipping Name** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.\*

## 15. REGULATORY INFORMATION

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

#### International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Phosphorodichloridic acid, phenyl ester	212-220-6	-		X	-	X	X	X	-	-	-

#### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory Lists

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**CHINA** - China Inventory of Existing Chemical Substances

**AICS** - Inventory of Chemical Substances

**KECL** - Existing and Evaluated Chemical Substances

#### Chemical Safety Assessment

## 16. OTHER INFORMATION

#### Text of R phrases mentioned in Section 2-3

R14 - Reacts violently with water

R22 - Harmful if swallowed

R29 - Contact with water liberates toxic gas

R34 - Causes burns

**Revision Date** 06-Nov-2010

**Revision Summary** Not applicable

**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**16. OTHER INFORMATION****Disclaimer**

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text

End of Safety Data Sheet