TCI EUROPE N.V.

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# SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

	evision number: 1	
	substance/mixture and of the company/underta	iking
.1 Product identifiers		
Product name:	Phenyl Dichlorophosphate	
Product code:	P0209	
.2 Relevant identified uses of the su Identified uses:	bstance or mixture and uses advised against Reagents.	
.3 Details of the supplier of the safe	ty data sheet	
TCI EUROPE N.V. Boerenveldseweg 6		
Haven 1063		
B-2070 Zwijndrecht		
Telephone: +32(0)3 735 07 (	00	
E-mail: sales-eu@tcichemica		
.4 Emergency telephone number:	+32(0)70 245 245	
SECTION 2: Hazards identification		
1 Classification of the substance or		
Corrosive to metals	Category 1	
Acute toxicity (Oral)	Category 4	
Skin corrosion/irritation	Category 1B	
Serious eye damage/eye irritation		
Serious eye damage/eye irritation	n Category 1 Danger H290-May be corrosive to metals.	
Serious eye damage/eye irritation 2 Label elements Pictograms or hazard symbols Signal word Hazard statements	n Category 1 Danger H290-May be corrosive to metals. H302-Harmful if swallowed. H314-Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation 2 Label elements Pictograms or hazard symbols	Danger         H290-May be corrosive to metals.         H302-Harmful if swallowed.         H314-Causes severe skin burns and eye damage.         P260-Do not breathe dusts or mists.         P280-Wear protective gloves, protective clothing, fact         P301+P330+P331+P310-IF SWALLOWED: Rinse m         POISON CENTER or doctor.         P303+P361+P353+P310+P363-IF ON SKIN (or hair         Rinse skin with water or shower. Immediately call a l         clothing before reuse.         P304+P340+P310-IF INHALED: Remove person to         Immediately call a POISON CENTER or doctor.         P305+P351+P338+P310-IF IN EYES: Rinse cautiout	nouth. Do NOT induce vomiting. Immediately call ): Take off immediately all contaminated clothing. POISON CENTER or doctor. Wash contaminated fresh air and keep comfortable for breathing. Isly with water for several minutes. Remove conta
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### SECTION 3: Composition/information on ingredients

3.1 Substances	
Components:	Phenyl Dichlorophosphate
Percent:	>98.0%(GC)(T)
CAS RN:	770-12-7
EC-No:	212-220-6
Synonyms:	Phenyl Phosphorodichloridate, Phenylphosphoric Acid Dichloride, Phenylphosphoryl Dichloride
Chemical Formula:	C6H5Cl2O2P

# SECTION 4: First aid measures 4.1 Description of first aid measures Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Skin contact: Remove /Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician. Eye contact: 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. Ingestion: Immediately call a POISON CENTER or doctor/physician. Protection of first-aiders: A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

# 4.2 Most important symptoms and effects, both acute and delayed No data available

#### **4.3 Indication of any immediate medical attention and special treatment needed** No data available

SECTION 5: Firefighting measures		
5.1 Extinguishing media Suitable extinguishing media: Unsuitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide. Solid streams of water	
5.2 Special hazards arising from the substance or mixture	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume. Carbon dioxide, Carbon monoxide, Hydrogen chloride, Phosphorus oxides	
5.3 Advice for firefighters	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so. When extinguishing fire, be sure to wear personal protective equipment	
SECTION 6: Accidental release mea	asures	
6.1 Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc	
6.2 Environmental precautions	Prevent product from entering drains	
6.3 Methods and materials for containment and cleaning up	Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.	
6.4 Reference to other sections	For disposal see section 13.	
SECTION 7: Handling and storage		
7.1 Precautions for safe handling	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid contact with skin, eyes and clothing. Use corrosive resistant equipment.	
7.2 Conditions for safe storage, including any incompatibilities	Keep container tightly closed. Store in a cool and dark place. Store under inert gas. Protect from moisture. Store locked up. Store away from incompatible materials such as oxidizing agents. Moisture-sensitive	
7.3 Specific end use(s)	No further relevant information available.	

SECTION 8: Exposure controls/personal protection		
8.1 Control parameters	No data available	
8.2 Exposure controls	Install a closed system or local exhaust. Also install safety shower and eye bath.	
Respiratory protection:	Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.	
Hand protection:	Impervious gloves.	
Eye protection:	Safety goggles. A face-shield, if the situation requires.	
Skin and body protection:	Impervious protective clothing. Protective boots, if the situation requires.	

SECTION Q.	Physical	and chemica	Inronartias
SECTION 7.	FIIVSICAL	and chemica	I DI UDEI LIES

9.1 Information on basic physical and chemical properties			
Physical state (20°C):	Liquid		
Form:	Clear		
Colour:	Colorless - Slightly pale yellow		
Odour:	Characteristic		
pH:	No data available		
Melting point/freezing point:	No data available		
Boiling point/range:	240°C		
Flash point:	No data available		
Evaporation rate(Butyl Acetate=1):	No data available		
Flammability(solid, gas):	No data available		
Flammability or explosive limits:			
Lower:	No data available		
Upper:	No data available		
Vapour pressure:	No data available.		
Vapour density:	No data available		
Relative density:	1.42		
Solubility(ies):			
[Water]	No data available		
[Other solvents]			
Very soluble:	Nonprotolytic solvents		
Partition coefficient: n-octanol/water:	No data available		
Autoignition temperature:	No data available		
Decomposition temperature:	No data available		
Dynamic Viscosity:	No data available		
Kinematic viscosity:	No data available		
Amenialic viscosity.			
9.2 Other safety information	No data available		

SECTION 10: Stability and reactivity		
10.1 Reactivity	No data available	
10.2 Chemical stability	Stable under proper conditions.	
10.3 Possibility of hazardous reactions	No special reactivity has been reported.	
10.4 Conditions to avoid	No data available	
10.5 Incompatible materials	Oxidizing agents, Strong bases, Alcohols	

10.6 Hazardous decomposition products Carbon dioxide, Carbon monoxide, Hydrogen chloride, Phosphorus oxides

# SECTION 11: Toxicological information

1.1 Information on toxicological effects	
Acute Toxicity:	orl-mam LD50:850 mg/kg
Skin corrosion/irritation:	No data available
Serious eye damage/irritation:	No data available
Respiratory or skin sensitization:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	
IARC =	No data available
NTP =	No data available
Reproductive toxicity:	No data available
STOT-single exposure:	No data available
STOT-repeated exposure:	No data available
Aspiration hazard:	No data available
RTECS Number:	TD4393000

SECTION 12: Ecological information

12.1 Toxicity	
Fish:	No data available
Crustacea:	No data available
Algae:	No data available
12.2 Persistence and degradability	No data available
12.3 Bioaccumulative potential	No data available
12.4 Mobility in soil	
Log Pow:	No data available
Soil adsorption (Koc):	No data available
Henry's Law (PaM ³/mol):	No data available
12.5 Results of PBT and vPvB assess	ment
PBT:	Not applicable
vPvB:	Not applicable
12.6 Other adverse effects	No data available

SECTION 13: Disposal considerations

## 13.1 Waste treatment methods

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

SECTION 14: Transport information		
14.1 UN number	3265	
14.2 UN proper shipping name		
ADR/RID	Corrosive liquid, acidic, organic, n.o.s	
IMDG/IMO	Corrosive liquid, acidic, organic, n.o.s	
ICAO/IATA	Corrosive liquid, acidic, organic, n.o.s	
14.3 Transport hazard class(es)		
ADR/RID	8: Corrosive	
IMDG/IMO	8: Corrosive	
ICAO/IATA	8: Corrosive	
14.4 Packaging group		
ADR/RID	11	
IMDG/IMO	II	
ICAO/IATA	II	
14.5 Environmental hazards		
Marine pollutant	-	
14.6 Special precautions for user	No data available	

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Substance of Very High Concern (SVHC) according to the Not listed REACH Regulations (EC) No.1907/2006

#### 15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information	
Prepared by:	TCI EUROPE N.V.
Issue date:	10/24/2019

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

End of Safety Data Sheet