

MATERIAL SAFETY DATA SHEET

Section 1 -Product and Company Identification

Product name: Diphenylphosphinic chloride
Applicant name: MHX (Changzhou) Biotech Limited
Fax: +86 519 88721515
Emergency phone number: +86 519 88721112

Section 2 –Hazards Identification

Label elements of the substance according to GHS(the fourth revised edition):

Pictogram



Signal

Danger

Hazardstatement(s)

H226 Flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

Precautionary statements

P280 Wear protective gloves/ protective clothing/ 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.

Section 3 –Composition/Information on Ingredients

| Component | Concentration | CAS No. | EC No. |
|-----------------------------|-------------------|-----------|-----------|
| Diphenylphosphinic chloride | Commercial secret | 1499-21-4 | 216-107-2 |

Synonyms: Chlorodiphenylphosphine oxide

Section 4 –First Aid Measures

General advice:

Consult a physician. Show this safety data sheet to the doctor in attendance.

After skin contact:

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

After eye contact:

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After ingestion:

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

After inhalation:

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.



Section 5 –Fire Fighting Measures

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| Hazardous products of combustion: | Carbon oxides, Oxides of phosphorus, Hydrogen chloride gas. |
| Extinguishing method: | For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water. |
| Special protective equipment : | Wear self contained breathing apparatus for fire fighting if necessary. |

Section 6 –Accidental Release Measure

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| Personal precautions: | Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. |
| Environmental precautions: | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Methods for cleaning up: | Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. |

Section 7 –Handling and Storage

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| Handling: | Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. |
| Storage: | Nitrogen protection, Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Moisture sensitive. |

Section 8 –Exposure Controls, Personal Protection

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| Respiratory protection: | Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination |
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| | (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). |
| Eye protection: | Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). |
| Body protection: | Protective work clothing |
| Hand Protection: | Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 376 derived from it. |
| Body Protection: | Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. |
| Other protection: | Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. |

Section 9 –Physical and Chemical Properties

Appearance: Light yellow to yellow liquid

Melting point (°C) : 20°C

Boiling point (°C) :

222 °C at 21 hPa - lit.

Saturated vapor pressure(Kpa):

No data available

Flash point (°C) : 26 °C - closed cup

Odor:No data available

Relative density (g/cm³) : 1,24 g/cm³ at 25 °C

Relative density of steam distillation

(g/mL) : No data available

Heat of combustion (kJ/mol) :

No data available

Critical pressure (Mpa) :



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| Ignition temperature (°C) : No data available | No data available |
| Partition coefficient octanol/water: No data available | Upper explosive limit% (V/V) : No data available |
| | Lower explosive limit% (V/V) : No data available |

Section 10 –Stability and Reactivity

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| Stability: | No data available. |
| Substances to avoid: | Strong bases, Strong oxidizing agents, Amines, Alcohols |
| Condition to avoid contact | Heat, flames and sparks. |
| Hazardous decomposition products: | Reacts with water to form: - Hydrogen chloride gas |

Section 11 –Toxicological Information

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| Acute toxicity: | No data available. |
| Skin corrosion/irritation: | No data available. |
| Serious eye damage/eye irritation: | No data available. |
| Respiratory or skin sensitization: | No data available. |
| Germ cell mutagenicity: | No data available. |
| Carcinogenicity: | IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| Reproductive toxicity: | No data available. |
| Specific target organ toxicity –single exposure: | No data available. |
| Specific target organ toxicity –repeated exposure: | No data available. |
| Aspiration hazard: | No data available. |

Section 12 –Ecological Information

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| Ecotoxicity: | No data available. |
| Biodegradability: | No data available. |
| Abiotic degradation: | No data available. |
| Bioaccumulation: | No data available. |
| Other hazards | No data available. |

Section 13 –Disposal Considerations

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| Property of waste: | No data available. |
| Methods of disposal: | Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to |



Precautions of disposal: dispose of this material.
No data available.

Section 14 -Transport Information

UN number: 2920
UN proper shipping name: CORROSIVE LIQUID, FLAMMABLE,
N.O.S.
Transport hazard class: Class8(3)
Packing group: II

Section 15 -Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture: This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Section 16 -Additional Information

Other information: The information contained herein is prepared according to UN GHS (the fourth revised edition) and is accurate to the best of our knowledge. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, however arising, even if the company has been advised of the possibility of such damages.