

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product name : Hexylphosphonic Acid
 CAS No. : 4721-24-8

Manufacturer or supplier's details

Company : Heynova (Shanghai) New Material Technology CO., Ltd
 Address : Building 3, No. 690 Bibo Road, Pudong New Area, Shanghai, China
 Telephone : +86-178-2110-2608
 E-mail address : info@heynovachem.com

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	: Solid form
Color	: white
May be corrosive to metals. Causes severe skin burns and eye damage.	

GHS Classification

Corrosive to Metals : Category 1
 Skin corrosion/irritation : Category 1C
 Serious eye damage/eye irritation : Category 1

GHS label elements

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H290 May be corrosive to metals.
 H314 Causes severe skin burns and eye damage.

Precautionary Statements : **Prevention:**
 P234 Keep only in original container.
 P260 Do not breathe dusts or mists.
 P264 Wash skin thoroughly after handling.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
 P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water

for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing. Immediately call a POISON CENTER/ doctor.
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.

Storage:

P405 Store locked up.
P406 Store in corrosive resistant container with a resistant inner liner.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Physical and chemical hazards

May be corrosive to metals.

Health hazards

Causes severe skin burns and eye damage. Causes serious eye damage.

Environmental hazards

Not classified based on available information.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Components

Chemical name	CAS RN	Concentration (% w/w)
Hexylphosphonic Acid	4721-24-8	98

4. FIRST AID MEASURES

If inhaled : Remove person to fresh air and keep comfortable for breathing.
Immediately call a POISON CENTER or doctor/ physician.

In case of skin contact : Take off all contaminated clothing immediately.
If on skin, rinse well with water.
If skin irritation or rash occurs: Get medical advice/ attention.

In case of eye contact : Rinse with plenty of water.
If easy to do, remove contact lens, if worn.
Immediately call a POISON CENTER or doctor/ physician.

If swallowed : Immediately call a POISON CENTER or doctor/ physician.
Rinse mouth.
Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed : None known.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry powder, Foam, Water spray, Carbon dioxide (CO₂)

Specific hazards during fire fighting : No information available.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Immediately evacuate personnel to safe areas.
Remove undamaged containers from fire area if it is safe to do so.

Special protective equipment for fire-fighters : Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Wear suitable protective equipment.
Keep people away from and upwind of spill/leak.
Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Environmental precautions : Prevent product from entering drains.

Methods and materials for containment and cleaning up : Pick up and arrange disposal without creating dust.

7. HANDLING AND STORAGE

Handling

Technical measures : Prevent dispersion of dust.

Local/Total ventilation : Ensure adequate ventilation.
Handle product only in closed system or provide appropriate exhaust ventilation at machinery.
Use a local exhaust ventilation.

Advice on safe handling : Avoid contact with skin, eyes and clothing.
Wear personal protective equipment.
Wash hands and face thoroughly after handling.
Keep only in original packaging.

Avoidance of contact : Oxidizing agents, Bases

Storage

Conditions for safe storage : Keep container tightly closed.
Store in a cool and shaded area.
Store locked up.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Install a closed system or local exhaust.
Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection : Dustproof gas mask
Self-contained breathing apparatus

Eye/face protection : Safety glasses
Safety goggles
Face-shield

Skin and body protection : Impervious protective clothing

Hand protection : Impervious gloves

*Use personal protective equipment(PPE) approved under appropriate government standards and follow local and national regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	solid
Color	:	white
Odor	:	No data available
Odor Threshold	:	No data available
pH	:	No data available
Melting point/freezing point	:	108 °C
Boiling point/boiling range	:	No data available
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Solubility(ies)		
Water solubility	:	No data available
Solubility in other solvents	:	soluble Solvent: Methanol
Partition coefficient: n-octanol/water	:	1.08
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Molecular weight	:	166.16 g/mol

10. STABILITY AND REACTIVITY

Reactivity	:	No data available
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	None under normal processing.
Incompatible materials	:	Oxidizing agents, Bases
Hazardous decomposition products	:	Carbon monoxide, Carbon dioxide (CO ₂), Oxides of phosphorus

11. TOXICOLOGICAL INFORMATION

Acute toxicity : No information available.

Skin corrosion/irritation

Product:

Result : Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days.

Components:

Hexylphosphonic Acid:

Result : Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days.

Serious eye damage/eye irritation

Product:

Result : Irreversible effects on the eye

Components:

Hexylphosphonic Acid:

Result : Irreversible effects on the eye

Respiratory or skin sensitization : No information available.

Germ cell mutagenicity : No information available.

Carcinogenicity : No information available.

Reproductive toxicity : No information available.

STOT-single exposure : No information available.

STOT-repeated exposure : No information available.

Repeated dose toxicity : No information available.

Aspiration toxicity : No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

Components:

Hexylphosphonic Acid:

Partition coefficient: n-octanol/water : 1.08

Mobility in soil

No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS**Disposal methods**

- | | | |
|------------------------|---|---|
| Waste from residues | : | Disposal in accordance with local and national regulations.
Entrust disposal to a licensed waste disposal company. |
| Contaminated packaging | : | Disposal in accordance with local and national regulations.
Before disposal of used container, remove contents completely. |

14. TRANSPORT INFORMATION**International Regulations****IATA-DGR**

- | | | |
|----------------------|---|--|
| UN/ID No. | : | UN 3261 |
| Proper shipping name | : | Corrosive solid, acidic, organic, n.o.s. |
| Class | : | 8 |
| Packing group | : | III |

IMDG-Code

- | | | |
|----------------------|---|--|
| UN number | : | UN 3261 |
| Proper shipping name | : | CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. |
| Class | : | 8 |
| Packing group | : | III |
| EmS Code | : | F-A, S-B |

Domestic regulation**GB 6944/12268**

- | | | |
|----------------------|---|--|
| UN number | : | UN 3261 |
| Proper shipping name | : | CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. |
| Class | : | 8 |
| Packing group | : | III |

15. REGULATORY INFORMATION**Measures on the Environmental Administration of New Chemical Substances Registration**

Registration/Notification number : B1A232216442

Downstream users need to comply with the conditions of safe use of the chemical, understand the environmental and health hazard and risk management measures identified on the SDS as well as the local/national regulations concerning the chemical.

The ingredients of this product are reported in the following inventories:

- | | | |
|-----------|---|---|
| CH BAGREG | : | Not in compliance with the inventory |
| TSCA | : | Substance(s) not listed on TSCA inventory |
| AICS | : | Not in compliance with the inventory |
| DSL | : | This product contains the following components that are not on the Canadian DSL nor NDSL.

Hexylphosphonic Acid |
| ENCS | : | Not in compliance with the inventory |

ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	Not in compliance with the inventory
NZIoC	:	Not in compliance with the inventory

16. OTHER INFORMATION

Revision Date	:	2024/12/14
Date format	:	yyyy/mm/dd

Disclaimer

This SDS was prepared sincerely based on the information 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 operations, sufficient care should be taken, in addition to the safety measures suitable for the given 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.