



Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: Diphenylphosphoryl azide

Product code (SDS NO): 9067E-1

Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.

Address: 3-1, Honmachibashi, Chuo-ku, Osaka 540-0029, JAPAN

Division: Safety Management Dept. of Chemicals

Telephone number: +81-6-6946-8061

FAX: +81-6-6946-1607

e-mail address: kagakuhinanzenkanri@kishida.co.jp

2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

HEALTH HAZARDS

Acute toxicity (Oral): Category 2

Acute toxicity (Dermal): Category 2

Acute toxicity (Inhalation): Category 2

Skin corrosion/irritation: Category 2

Serious eye damage/eye irritation: Category 2A

(Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

Label elements



Signal word: Danger

HAZARD STATEMENT

Fatal if swallowed

Fatal in contact with skin

Fatal if inhaled

Causes skin irritation

Causes serious eye irritation

PRECAUTIONARY STATEMENT

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray.

In case of inadequate ventilation wear respiratory protection. (as specified by the manufacturer/supplier or the competent authority.)

Use only outdoors or in a well-ventilated area.

Do not get in eyes, on skin, or on clothing.

Wash contaminated parts thoroughly after handling.

Wear protective gloves or protective clothing.

Wear eye protection/face protection.

Do not eat, drink or smoke when using this product.

Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing.



IF ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

Take off immediately all contaminated clothing and wash it before reuse.

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

If eye irritation persists: Get medical advice/attention.

Rinse mouth.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Storage

Store in a well-ventilated place. Keep container tightly closed.

Disposal

Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Ingredient name: Diphenylphosphoryl azide

Content(%): 96(min)

Chemical formula: C₁₂H₁₀N₃O₃P

Chemicals No, Japan: 3-3359

CAS No.: 26386-88-9

MW: 275.20

ECNO: 247-644-0

Note : The figures shown above are not the specifications of the product.

4. First-aid measures

Descriptions of first-aid measures

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Specific hazards arising from the substance or mixture

Containers may explode when heated.

Fire may produce irritating, corrosive and/or toxic gases.

Advice for firefighters

Specific fire-fighting measures



Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Exhaust/ventilator

Exhaust/ventilator should be available.

Safety treatments

Avoid contact with skin.

Avoid contact with eyes.

Safety Measures/Incompatibility

Use only outdoors or in a well-ventilated area.

Wear protective gloves, protective clothing or face protection.

Wear eye protection/face protection.

When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

Keep container tightly closed.

Store in a cool, dry place. Do not store in direct sunlight.

8. Exposure controls/personal protection

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves.

Eye protection



Wear eye/face protection.

Safety and Health measures

Do not get in eyes, on skin, or on clothing.

Wash ... thoroughly after handling.

Do not eat, drink or smoke when using this product.

Take off immediately all contaminated clothing and wash it before reuse.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

Appearance: Liquid

Color: Colorless or pale yellow

Odor data N.A.

pH data N.A.

Phase change temperature

Initial Boiling Point/Boiling point data N.A.

Boiling range data N.A.

Melting point/Freezing point data N.A.

Decomposition temperature data N.A.

Flash point: (Diphenylphosphoryl azide)about 112°C

Auto-ignition temperature data N.A.

Explosive properties data N.A.

Vapor pressure data N.A.

Specific gravity/Density data N.A.

Solubility

Solubility in water: Insoluble

n-Octanol/water partition coefficient data N.A.

10. Stability and Reactivity

Reactivity

N.A.

Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

Reacts with moisture or water. This produces toxic and explosible gases (hydrogen azide).

Conditions to avoid

Contact with incompatible materials.

Contact with fire source.

Incompatible materials

Acids, Oxidizing agents, Metals

Hazardous decomposition products

Carbon oxides, Nitrogen oxides, Phosphoric oxide, Hydrogen azide

11. Toxicological Information

Information on toxicological effects

No Acute toxicity data available

No Irritant properties data available

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

No Carcinogenic effects data available

No Teratogenic effects data available



No reproductive toxicity data available
No STOT-single/repeated exposure data available
No Aspiration hazard data available

12. Ecological Information

Ecotoxicity
No Aquatic toxicity data available
No Persistence and degradability data available
No Bioaccumulative potential data available
No Mobility in soil data available
Ozone depleting chemical data not available

13. Disposal considerations

Waste treatment methods
Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No.: 3278
Proper Shipping Name :
ORGANOPHOSPHORUS COMPOUND, LIQUID, TOXIC, N.O.S.
Class or division : 6.1
Packing group : II
ERG GUIDE No.: 151
Special provisions No.: 43; 274
IMDG Code (International Maritime Dangerous Goods Regulations)
UN No.: 3278
Proper Shipping Name :
ORGANOPHOSPHORUS COMPOUND, LIQUID, TOXIC, N.O.S.
Class or division : 6.1
Packing group : II
Special provisions No.: 43; 274
IATA Dangerous Goods Regulations
UN No.: 3278
Proper Shipping Name :
ORGANOPHOSPHORUS COMPOUND, LIQUID, TOXIC, N.O.S.
Class or division : 6.1
Hazard labels : Toxic
Packing group : II
Special provisions No.: A4
Environmental hazards
MARPOL Annex III – Prevention of pollution by harmful substances
Marine pollutants (yes/no) : no

15. Regulatory Information

Other regulatory information
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

**16. Other information****GHS classification and labelling**

Acute Tox. 2: H300 Fatal if swallowed
Acute Tox. 2: H310 Fatal in contact with skin
Acute Tox. 2: H330 Fatal if inhaled
Skin Irrit. 2: H315 Causes skin irritation
Eye Irrit. 2A: H319 Causes serious eye irritation

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN
IMDG Code (Amendment 38-16) 2016
IATA Dangerous Goods Regulations (59th Edition) 2018
Classification, labelling and packaging of substances and mixtures (table 3-1 ECNO6182012)
2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2018 TLVs and BEIs. (ACGIH)
<http://monographs.iarc.fr/ENG/Classification/index.php>
Supplier's data/information

General Disclaimer

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It is advised to make their own tests to determine the safety and suitability of each such product or combination for their own purposes.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2017).