

## Revision number: 3 Revision date: 08/15/2016

# 1. IDENTIFICATION

Product name: Product code: Diphenylphosphoryl Azide D1672

#### Product use: Restrictions on use:

## Company:

TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

# 2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: Acute Toxicity - Oral [Category 2] Acute Toxicity - Dermal [Category 2] Acute Toxicity - Inhalation [Category 2]

Signal word:

Hazard Statement(s):

Fatal if swallowed Causes serious eye irritation Causes skin irritation Fatal in contact with skin Fatal if inhaled

Danger!

Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 2A]

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal] Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Do not get in eyes, on skin, or on clothing. Wear protective gloves and protective clothing. Do not breathe fume, mist, vapors or spray. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection. Wear protective gloves. Wear eye and face protection. If swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin: Wash with plenty of water. Immediately call a poison center or doctor. Take off immediately all contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. If skin irritation or rash occurs: Get medical advice/attention. Take off 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 or attention. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

Hazards not otherwise classified: [HNOC] May develop pressure

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SAFETY DATA SHEET

Emergency telephone number:

Transportation Emergencies:

+1-703-527-3887 (International) Responsible department:

Environmental Health Safety and Security

TCI America (8:00am - 5:00pm) PST

Chemical Emergencies:

+1-503-286-7624

Chemtrec 24-Hour +1-800-424-9300 (U.S.A.)

**TCI** America

+1-503-286-7624

For laboratory research purposes. Not for drug or household use.

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# 2. HAZARD(S) IDENTIFICATION

3. COMPOSITION/INFORMATION	ON INGREDIENTS
Substance/Mixture: Components:	Substance Diphenylphosphoryl Azide
Percent:	>97.0%(GC)
CAS Number:	26386-88-9
Molecular Weight:	275.20
Chemical Formula:	$C_{12}H_{10}N_3O_3P$
Synonyms:	DPPA
4. FIRST-AID MEASURES	
Inhalation:	Immediately call a poison center or doctor. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take
Skin contact:	precautions to protect themselves. Immediately call a poison center or doctor. Remove and wash contaminated clothing before re-use. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and
Eye contact:	take precautions to protect themselves. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Contact with material may irritate or burn eyes. Call emergency medical service. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of conserved to substrate and the delayed. Ensure that medical personal are supported by the metricit(a).
Ingestion:	<ul> <li>exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.</li> <li>Fatal if swallowed. Do not induce vomiting with out medical advice. Call a physician or Poison Control Center immediately. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.</li> </ul>
Symptoms/effects:	
Acute: Delayed:	Redness. No data available
Immediate medical attention:	WARNING: It might be dangerous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is toxic. If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
5. FIRE-FIGHTING MEASURES	
Suitable extinguishing media:	Dry chemical, $CO_2$ or water spray. Consult with local fire authorities before attempting large scale fire fighting operations.
Specific hazards arising from the che	
Hazardous combustion products: Other specific hazards:	These products include: Carbon oxides Nitrogen oxides Phosphates Closed containers may explode from heat of a fire.
heated. Move containers from fire area i Special protective equipment for fire-	ght streams. Dike fire-control water for later disposal; do not scatter the material. Containers may explode when f you can do it without risk. <b>fighters:</b> reathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations
	ations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may
6. ACCIDENTAL RELEASE MEAS	SURES

# **Personal precautions:**

Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6. ACCIDENTAL RELEASE MEASURES			
Personal protective equipment:	Wear eye protection (splash goggles) and face protection (full length face shield). Lab coat. Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).		
Emergency procedures:	In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.		

## Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material. **Environmental precautions:** 

Keep away from living quarters. Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

# 7. HANDLING AND STORAGE Precautions for safe handling: Do NOT breath gas, fumes, vapor, or spray. Do not ingest. Avoid contact with skin and eyes. Avoid contact with skin. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition. Store locked up. Keep containers tightly closed in a cool, well-ventilated place. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods. Store under inert gas (e.g. Argon). Moisture sensitive. Store in refrigerator. Storage incompatibilities: Store away from oxidizing agents

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Exposure limits:**

No data available

# Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

# Personal protective equipment

Respiratory protection:Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.Hand protection:Wear protective gloves.Eye protection:Splash goggles.Skin and body protection:Lab coat.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:	Liquid Clear Colorless - Very pale yellow No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	No data available No data available No data available 1.28 No data available	pH: Vapor pressure: Vapor density: Dynamic Viscosity:	No data available No data available No data available No data available
Partition coefficient: n-octanol/water (log Pow)	No data available	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	110°C (230°F) No data available		

#### Solubility(ies):

Water: Insoluble (Decomposes)

Very soluble: Acetone, Toluene, Dimethylformamide(DMF), Many organic solvents

Algae:

Mobillity in soil:

Partition coefficient:

n-octanol/water (log Pow)

Soil adsorption (Koc): Henry's Law:

constant (PaM3/mol)

Persistence and degradability: Bioaccumulative potential (BCF):

# **10. STABILITY AND REACTIVITY**

Reactivity:
Chemical Stability:
Possibility of Hazardous Reactions:
Conditions to avoid:
Incompatible materials:
Hazardous Decomposition Products:

Not Available. Heat sensitive. Moisture sensitive. No hazardous reactivity has been reported. Exposure to moisture. Heat sensitive. Moisture sensitive. Oxidizing agents No data available

# 11. TOXICOLOGICAL INFORMATION

Acute Toxicity: No data available				
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:				
No data available				
IARC: No data available	NTP:	No data available	OSHA:	No data available
<b>Reproductive toxicity:</b> No data available				
Routes of Exposure: Symptoms related to exposure: Overexposure may result in serious illness or blistering. Skin contact may result in redness, Potential Health Effects:	death. Skin contact		n; characterized by itchin	g, scaling, reddening, or occasionally
Skin and eye contact may result in irritation. Target organ(s):	No data available			
12. ECOLOGICAL INFORMATION				
Ecotoxicity Fish: Crustacea:	No data available No data available			

No data available

No data available No data available

No data available

No data available

No data available

No data available

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Disposal of product:	Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local
Disposal of product.	rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a
	chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide
	assistance but does not replace these laws, nor does compliance in accordance with this section ensure
	regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous
	Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.
Disposal of container:	Dispose of as unused product. Do not re-use empty containers.
Other considerations:	Observe all federal, state and local regulations when disposing of the substance.

## **14. TRANSPORT INFORMATION**

DOT (US) UN number: UN3278	<b>Proper Shipping Name:</b> Organophosphorus compound, liquid, toxic, n.o.s.	<b>Class or Division:</b> 6.1 Toxic material.	Packing Group: II
<b>IATA</b> UN number: UN3278	<b>Proper Shipping Name:</b> Organophosphorus compound, liquid, toxic, n.o.s.	<b>Class or Division:</b> 6.1 Toxic material.	Packing Group: II
IMDG UN number: UN3278	<b>Proper Shipping Name:</b> Organophosphorus compound, liquid, toxic, n.o.s.	<b>Class or Division:</b> 6.1 Toxic material.	Packing Group: II
EmS number:	F-A, S-B		

# 15. REGULATORY INFORMATION

# Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

(i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.

(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

# **US Federal Regulations**

CERCLA Hazardous substance and Reportable Quantity:			
SARA 313:	Not Listed		
SARA 302:	Not Listed		

## **State Regulations**

## State Right-to-Know

Massachusetts	Not Listed
New Jersey	Not Listed
Pennsylvania	Not Listed
California Proposition 65:	Not Listed

## **Other Information**

NFPA Rating:

Health:	4	Health:
Flammability:	1	Flammability:
Instability:	0	Physical:

#### International Inventories

WHMIS hazard class:

Canada: DSL EC-No: D1A: Materials causing immediate and serious toxic effects. (Very Toxic) D2B: Materials causing other toxic effects. (Toxic) On DSL 247-644-0

HMIS Classification:

4 1 0

# 16. OTHER INFORMATION

#### Revision date: 08/15/2016 Revision number: 3

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.