

SECTION 1: Product and Company Identification

Identification of the substance or mixture

Catalog #: 10246, 10246-1
Product Name: DEPC
CAS-No.: 1609-47-8

Company Identification

Cepharm Life Sciences Inc.
 11830 W Market Place, Suite K
 Fulton, MD 20759
 USA
 Toll Free: 1-800-257-1565
 Phone: 410-636-4954

24-hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident, Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Toll Free: 1-800-424-9300/ +1 703-527-3887 CCN 1010970

For Research Use Only. Not for use in diagnostic procedures.


SECTION 2: Hazards identification

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 4), H227
 Acute toxicity, Oral (Category 4), H302
 For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS Label Elements, including Precautionary Statements

Pictogram	
Signal word	Warning
Hazard statement(s)	
H227	Combustible liquid.
H302	Harmful if swallowed.
Precautionary statement(s)	
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/ eye protection/ face protection.
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403 + P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS – none

SECTION 3: Composition / Information on Ingredients

Substances

Synonyms: DEPC
DEP
Diethyl dicarbonate
Ethoxyformic acid anhydride
Diethyl oxydiformate

Formula: C6H10O5
Molecular weight: 162.14 g/mol
CAS-No.: 1609-47-8
EC-No.: 216-542-8

Hazardous components

Component	Classification	Concentration
Diethyl pyrocarbonate	Flam. Liq. 4; Acute Tox. 4; H227, H302	90 - 100%

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First Aid Measures

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

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

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting Measures

Extinguishing Media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

No data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and 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 (see section 13). Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

SECTION 7: Handling & Storage**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.

For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Handle under argon. Store under argon. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature 2 - 8 °C

Over time, pressure may increase causing containers to burst Handle and open container with care. Moisture sensitive.

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure Controls / Personal Protection**Control parameters****Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters

Exposure controls**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal Protective Equipment**Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin 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.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method:

EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) 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).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

a) Appearance	Form: liquid, clear Color: colorless
b) Odor	No data available
c) Odor Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	93-94 degrees C (199 – 201 F) @ 24 hPa (18 mmHg) – lit.
g) Flash point	69 degrees C (156 F) – closed cup
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapor pressure	No data available
l) Vapor density	No data available
m) Relative density	1.101 g/cm ³ at 25 °C (77 °F)
n) Water solubility	No data available
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

Other safety information

No data available

SECTION 10: Stability & Reactivity

Reactivity

No data available

Chemical stability

Water in the container will lead to increased pressure and risk of explosion. Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, Strong acids, Strong bases, Strong reducing agents, Ammonia

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sodium oxides
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological Information

Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 850 mg/kg
Inhalation: No data available
Dermal: No data available

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.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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

Additional Information

RTECS: LQ9350000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological Information

Toxicity

No data available

Persistence and degradability

No data available

Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

Mobility in soil

No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

No data available

SECTION 13: Disposal Considerations

Waste treatment methods

Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product

SECTION 14: Transport Information

DOT (US)

NA-Number: 1993 Class: NONE Packing group: III
Proper shipping name: Combustible liquid, n.o.s. (Diethyl pyrocarbonate)
Reportable Quantity (RQ):
Poison Inhalation Hazard: No

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory Information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Diethyl pyrocarbonate	CAS-No. 1609-47-8	Revision Date
-----------------------	-------------------	---------------

New Jersey Right To Know Components

Diethyl pyrocarbonate	CAS-No. 1609-47-8	Revision Date
-----------------------	-------------------	---------------

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other Information

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.	Acute toxicity
Flam.	Liq. Flammable liquids
H227	Combustible liquid.
H302	Harmful if swallowed.

HMIS Rating

Health hazard:	2
Chronic Health Hazard:	
Flammability:	2
Physical Hazard	0

NFPA Rating

Health hazard:	2
Fire Hazard:	2
Reactivity Hazard:	0

Disclaimer:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not represent any guarantee of the properties of the product. Cepham Life Sciences Incorporated and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.