

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 16 Aug 2022

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product name:

Diethyl phthalate

### 1.1. Catalog No.:

678978

### 1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical  
uses: R&D

### 1.3. Uses advised against:

HPC Standards GmbH  
Am Wieseneck 7

04451 Cunnersdorf  
Deutschland

Tel. +49 34291 3372-36  
Fax. +49 34291 3372-39  
contact@hpc-standards.com

### 1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36  
This number is only available during office hours.

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture  
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.  
This substance is not classified as dangerous according to Directive 67/548/EEC

### 2.2. Label elements

#### 2.2.1. Pictogram

#### 2.2.2.

2.2 Label elements  
Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.  
2.3 Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances  
Synonyms : DEP  
Formula : C<sub>12</sub>H<sub>14</sub>O<sub>4</sub>  
Molecular Weight : 222,24 g/mol  
CAS-No. : 84-66-2  
EC-No. : 201-550-6  
No components need to be disclosed according to the applicable regulations

### 3.1.1. Formula

C<sub>12</sub>H<sub>14</sub>O<sub>4</sub>

### 3.1.2. Molecular Weight (g/mol)

222.24

### 3.1.3. CAS-No.

84-66-2

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

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

#### 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

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 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

### 4.3 Indication of any immediate medical attention and special treatment needed

no data available

## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

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

### 5.2 Special hazards arising from the substance or mixture

#### Carbon oxides

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 Further information

no data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. 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.

### 7.3 Specific end use(s)

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Components with workplace control parameters

### 8.2 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

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 Body Protection

impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### a) Appearance Form: liquid

Colour: light yellow

#### b) Odour no data available c) Odour Threshold no data available

#### d) pH no data available

#### e) Melting point/freezing point

Melting point/range: -3 °C

#### f) Initial boiling point and boiling range

298 - 299 °C

#### g) Flash point 156,0 °C - closed cup

#### h) Evaporation rate no data available

#### i) Flammability (solid, gas) no data available

#### j) Upper/lower flammability or explosive limits

Lower explosion limit: 0,75 %(V)

#### k) Vapour pressure < 28 hPa at 25 °C

#### l) Vapour density 7,7 - (Air = 1.0)

#### m) Relative density 1,12 g/mL at 25 °C

#### n) Water solubility 0,932 g/l at 20 °C - OECD Test Guideline 105 - slightly soluble

#### o) Partition coefficient: octanol/water

log Pow: 2,2 at 41 °C

#### p) Auto-ignition temperature

457,0 °C

#### q) Decomposition temperature

no data available

#### r) Viscosity 11,53 mm<sup>2</sup>/s at 20 °C -

#### s) Explosive properties no data available

#### t) Oxidizing properties no data available

### 9.2 Other safety information

Relative vapour density 7,7 - (Air = 1.0)

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

Oxidizing agents, acids

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 8.600 mg/kg  
Remarks: Behavioral:Somnolence (general depressed activity).  
LC50 Inhalation - rat - 6 h - &gt; 4.640 mg/m3  
LD50 Dermal - rat - male and female - &gt; 10.000 mg/kg  
Skin corrosion/irritation  
Skin - rabbit  
Result: No skin irritation - 24 h  
Serious eye damage/eye irritation  
Eyes - rabbit  
Result: Moderate eye irritation  
Respiratory or skin sensitisation  
- mouse  
Result: Did not cause sensitisation on laboratory animals.  
(OECD Test Guideline 429)  
Germ cell mutagenicity  
mouse  
lymphocyte  
Result: negative  
Ames test  
S. typhimurium  
Result: negative  
Carcinogenicity  
Carcinogenicity - mouse - Skin  
Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors.  
This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.  
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  
Reproductive toxicity - rat - Intraperitoneal  
Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system.  
Reproductive toxicity - mouse - male - Oral  
Paternal Effects: Spermatogenesis (including genetic material, sperm morphology, motility, and count).  
Paternal Effects: Prostate, seminal vesicle, Cowper's gland, accessory glands. Effects on Newborn: Live birth index (# fetuses per litter; measured after birth).  
Developmental Toxicity - rat - Oral  
Specific Developmental Abnormalities: Musculoskeletal system.  
Developmental Toxicity - mouse - Skin  
Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system.  
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  
Repeated dose toxicity - rat - male and female - Oral - No observed adverse effect level - 150 mg/kg  
RTECS: T11050000  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

## 12. ECOLOGICAL INFORMATION

12.1 Toxicity  
Toxicity to fish static test LC50 - Oncorhynchus mykiss (rainbow trout) - 12 mg/l - 96 h  
Toxicity to daphnia and other aquatic invertebrates  
static test LC50 - Daphnia magna (Water flea) - 90 mg/l - 48 h  
Toxicity to algae static test EC50 - Desmodesmus subspicatus (Scenedesmus subspicatus) - 23 mg/l - 72 h  
(OECD Test Guideline 201)  
12.2 Persistence and degradability  
Biodegradability aerobic - Exposure time 28 d  
Result: 94,6 % - Readily biodegradable.  
12.3 Bioaccumulative potential  
Bioaccumulation Lepomis macrochirus (Bluegill) - 21 d  
- 0,00942 mg/l  
Bioconcentration factor (BCF): 117  
12.4 Mobility in soil  
no data available  
12.5 Results of PBT and vPvB assessment  
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted  
12.6 Other adverse effects  
Harmful to aquatic life

## 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product

## 14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: - 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

no data available

## 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

## 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!