

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 08 Sep 2022

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

### 1.1. Product name:

Diisobutyl phthalate

### 1.1. Catalog No.:

677385

### 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  
Classification according to Regulation (EC) No 1272/2008  
Reproductive toxicity (Category 1B), H360Df  
Acute aquatic toxicity (Category 1), H400  
Chronic aquatic toxicity (Category 1), H410 Classification according to EU Directives 67/548/EEC or 1999/45/EC  
R61  
R62  
R50/53

### 2.2. Label elements

#### 2.2.1. Pictogram



#### 2.2.2.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008  
Pictogram Signal word Danger Hazard statement(s)  
H360Df May damage the unborn child. Suspected of damaging fertility.  
H410 Very toxic to aquatic life with long lasting effects.  
Precautionary statement(s)  
P201 Obtain special instructions before use.  
P273 Avoid release to the environment.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
P501 Dispose of contents/ container to an approved waste disposal plant.  
Supplemental Hazard  
Statements  
none  
Restricted to professional users.  
2.3 Other hazards - none

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances  
Formula : C16H22O4  
Molecular Weight : 278,34 g/mol  
CAS-No. : 84-69-5  
EC-No. : 201-553-2  
Index-No. : 607-623-00-2  
Hazardous ingredients according to Regulation (EC) No 1272/2008  
Component Classification Concentration  
Diisobutyl phthalate Included in the Candidate List of Substances of Very High Concern (SVHC)  
according to Regulation (EC) No. 1907/2006 (REACH)  
CAS-No.  
EC-No.  
Index-No.  
84-69-5  
201-553-2  
607-623-00-2  
Repr. 1B; Aquatic Acute 1;  
Aquatic Chronic 1; H360Df,  
H410  
&lt;= 100 %  
Hazardous ingredients according to Directive 1999/45/EC  
Component Classification Concentration  
Diisobutyl phthalate Included in the Candidate List of Substances of Very High Concern (SVHC)  
according to Regulation (EC) No. 1907/2006 (REACH)  
CAS-No.  
EC-No.  
Index-No.  
84-69-5  
201-553-2  
607-623-00-2  
T, N, Repr.Cat.2, Repr.Cat.3,  
N, R61 - R62 - R50/53  
&lt;= 100 %

#### 3.1.1. Formula

C16H22O4

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

278.34

### 3.1.3. CAS-No.

84-69-5

## 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

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.  
Evacuate personnel to safe areas.  
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  
Soak up with inert absorbent material and dispose of as hazardous waste. 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  
Avoid exposure - obtain special instructions before use. Avoid inhalation of vapour or mist.  
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)  
Apart 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  
Safety glasses with side-shields conforming to EN166 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  
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) 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  
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: colourless
  - b) Odour no data available
  - c) Odour Threshold no data available
  - d) pH no data available
  - e) Melting point/freezing point  
Melting point/range: -37 &deg;C at 1.013,0 hPa
  - f) Initial boiling point and boiling range  
327 &deg;C - lit. g) Flash point 109 &deg;C - 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) Vapour pressure 0,112 hPa at 100 &deg;C
  - l) Vapour density no data available
  - m) Relative density 1,039 g/cm<sup>3</sup> at 25 &deg;C
  - n) Water solubility 0,0203 g/l at 20 &deg;C - OECD Test Guideline 105 - slightly soluble
  - o) Partition coefficient: noctanol/water  
log Pow: 4,11 at 20 &deg;C
  - p) Auto-ignition temperature  
423 &deg;C at 1.013 hPa
  - q) Decomposition temperature  
no data available
  - r) Viscosity 40,95 mm<sup>2</sup>/s at 20 &deg;C -
  - s) Explosive properties no data available
  - t) Oxidizing properties no data available
- ### 9.2 Other safety information
- no data available

## 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  
Strong oxidizing agents
- 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 - male and female - 10.392 mg/kg  
(OECD Test Guideline 401)

LD50 Dermal - guinea pig - 10.000 mg/kg  
Skin corrosion/irritation  
Skin - rabbit  
Result: No skin Irritation Serious eye damage/eye irritation  
Eyes - rabbit  
Result: No eye irritation  
(OECD Test Guideline 405)  
Respiratory or skin sensitisation  
- guinea pig  
Result: Does not cause skin sensitisation.  
(OECD Test Guideline 406)  
Germ cell mutagenicity  
Ames test  
S. typhimurium  
Result: negative  
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.  
Reproductive toxicity  
Presumed human reproductive toxicant  
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: T11225000  
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 flow-through test LC50 - Pimephales promelas (fathead minnow) - 0,73 mg/l - 96,0 h  
Toxicity to daphnia and other aquatic invertebrates  
EC50 - Daphnia magna (Water flea) - 7,4 mg/l - 24 h  
Toxicity to algae Growth inhibition EC50 - Desmodesmus subspicatus (green algae) - 1,7 mg/l - 72 h  
(OECD Test Guideline 201)  
Toxicity to bacteria NOEC - Sludge Treatment - 14,5 mg/l - 14 d  
12.2 Persistence and degradability  
Biodegradability aerobic - Exposure time 28 d  
Result: 40 % - Not readily biodegradable.  
(OECD Test Guideline 301B)  
12.3 Bioaccumulative potential  
no data available  
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  
Very toxic to aquatic life with long lasting effects

## 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: 3082 IMDG: 3082 IATA: 3082  
14.2 UN proper shipping name  
ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisobutyl phthalate)  
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisobutyl phthalate)  
IATA: Environmentally hazardous substance, liquid, n.o.s. (Diisobutyl phthalate)  
14.3 Transport hazard class(es)  
ADR/RID: 9 IMDG: 9 IATA: 9  
14.4 Packaging group  
ADR/RID: III IMDG: III IATA: III  
14.5 Environmental hazards  
ADR/RID: yes IMDG Marine pollutant: yes IATA: yes  
14.6 Special precautions for user  
Further information  
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination  
packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids

#### 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  
Authorisations and/or restrictions on use  
Diisobutyl phthalate CAS-No.: 84-69-5  
EU. REACH - Annex XIV: List of substances subject to authorisation  
Toxic for reproduction (category 1B)  
Sunset Date: 21.02.2015  
Diisobutyl phthalate CAS-No.: 84-69-5  
Candidate List of Substances of Very High Concern for Authorisation  
Toxic for reproduction (article 57c)  
ED/68/2009  
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!