

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 12 Jun 2023

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

### 1.1. Product name:

D4-Benzyl butyl phthalate

### 1.1. Catalog No.:

691084

### 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  
N Dangerous for the  
environment  
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 : C19H20O4  
Molecular Weight : 312,36 g/mol  
CAS-No. : 85-68-7  
EC-No. : 201-622-7  
Index-No. : 607-430-00-3  
Hazardous ingredients according to Regulation (EC) No 1272/2008  
Component Classification Concentration  
Benzyl butyl 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.  
85-68-7  
201-622-7  
607-430-00-3  
Repr. 1B; Aquatic Acute 1;  
Aquatic Chronic 1; H360Df,  
H410  
<= 100 %  
Hazardous ingredients according to Directive 1999/45/EC  
Component Classification Concentration  
Benzyl butyl 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.  
85-68-7  
201-622-7  
607-430-00-3  
T, N, Repr.Cat.2, Repr.Cat.3,  
R61 - R62 - R50/53  
<= 100 %

### 3.1.1. Formula

C19H20O4

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

316.38

### 3.1.3. CAS-No.

93951-88-3

## 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

no data available

### 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 gloves 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/freezing point: < -35 °C
  - f) Initial boiling point and boiling range  
370 °C
  - g) Flash point 113,0 °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 19,2 hPa at 250,0 °C  
0,3 hPa at 150,0 °C
  - l) Vapour density no data available
  - m) Relative density 1,1 g/cm<sup>3</sup> at 25 °C
  - n) Water solubility 0,00269 g/l at 25 °C - OECD Test Guideline 105 - slightly soluble
  - o) Partition coefficient: noctanol/  
water  
log Pow: 4,91 at 20 °C
  - p) Auto-ignition temperature  
232,0 °C
  - q) Decomposition temperature  
no data available
  - r) Viscosity no data available
  - 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, Strong bases
- 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 - 2.330 mg/kg

(OECD Test Guideline 401)  
LD50 Dermal - rabbit - > 10.000 mg/kg  
Skin corrosion/irritation  
no data available Serious eye damage/eye irritation  
no data available  
Respiratory or skin sensitisation  
- guinea pig  
Result: Does not cause skin sensitisation.  
Germ cell mutagenicity  
Ames test  
S. typhimurium  
Result: negative  
Carcinogenicity  
This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.  
IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Benzyl butyl phthalate)  
Reproductive toxicity  
Presumed human reproductive toxicant  
Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.  
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 - Oral - No observed adverse effect level - 550 mg/kg  
RTECS: TH9990000  
May cause endocrine disruption.  
pancreas -

## 12. ECOLOGICAL INFORMATION

12.1 Toxicity  
Toxicity to fish LC50 - Lepomis macrochirus (Bluegill) - 1,7 mg/l - 96,0 h  
NOEC - Oncorhynchus mykiss (rainbow trout) - 0,48 mg/l - 96,0 h  
flow-through test LC50 - Pimephales promelas (fathead minnow) - 2,1 mg/l - 96 h  
(OECD Test Guideline 203)  
Toxicity to daphnia and other aquatic invertebrates  
static test LC50 - Daphnia magna (Water flea) - 1,8 mg/l - 48 h  
Toxicity to algae Growth inhibition EC50 - Desmodesmus subspicatus (green algae) - 0,31 mg/l - 72 h  
(OECD Test Guideline 201)  
12.2 Persistence and degradability  
Biodegradability aerobic - Exposure time 14 d  
Result: 81 % - Readily biodegradable.  
12.3 Bioaccumulative potential  
Bioaccumulation Lepomis macrochirus (Bluegill) - 21 d  
- 0,00973 mg/l Bioconcentration factor (BCF): 663  
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.  
Avoid release to the environment

### 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. (Benzyl butyl phthalate)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzyl butyl phthalate)

IATA: Environmentally hazardous substance, liquid, n.o.s. (Benzyl butyl 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

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

Authorisations and/or restrictions on use

Benzyl butyl phthalate CAS-No.: 85-68-7

EU. REACH - Annex XIV: List of substances subject to authorisation

Toxic for reproduction (category 1B)

Sunset Date: 21.02.2015

Exempted (Categories of) Uses: Uses in the immediate packaging of medicinal products covered under

Regulation (EC) No 726/2004, Directive 2001/82/EC, and/or Directive 2001/83/EC.

Benzyl butyl phthalate CAS-No.: 85-68-7

Candidate List of Substances of Very High Concern for Authorisation

Toxic for reproduction (article 57c)

ED/67/2008

#### 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!