

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 02 Apr 2021

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

### 1.1. Product name:

Decahydronaphthalene-d18

### 1.1. Catalog No.:

1060

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

Identified: Laboratory chemical  
uses: R&D

### 1.3. Uses advised against:

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04318 Leipzig  
Germany

Tel. +49 341 5295 183  
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## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008  
Flammable liquids (Category 3), H226  
Acute toxicity, Inhalation (Category 3), H331  
Skin corrosion (Sub-category 1B), H314  
Long-term (chronic) aquatic hazard (Category 2), H411

### 2.2. Label elements

#### 2.2.1. Pictogram



#### 2.2.2.

2.2 Label elements  
Labelling according Regulation (EC) No 1272/2008  
Signal word Danger  
Hazard statement(s)  
H226 Flammable liquid and vapor.  
H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.  
H411 Toxic to aquatic life with long lasting effects.  
Precautionary statement(s)  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Supplemental Hazard Statements  
none  
2.3 Other hazards  
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances  
Synonyms : Decalin@-d18  
Formula : C10D18  
Molecular weight : 156.40 g/mol  
CAS-No. : 28788-42-3  
Component Classification Concentration  
decahydronaphthalene-d18 (mixture of cis-trans-isomers)  
Flam. Liq. 3; Acute Tox. 3;  
Skin Corr. 1B; Aquatic  
Chronic 2: H226, H331,  
H314, H411  
<= 100 %

#### 3.1.1. Formula

C10D18

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

156.36

#### 3.1.3. CAS-No.

28788-42-3

### 4. FIRST AID MEASURES

#### 4.1 Description of first-aid measures

##### General advice

Consult a physician. Show this material 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

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

##### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

##### If swallowed

Do NOT induce vomiting. 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 firefighting if necessary.
- 5.4 Further information  
Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures  
Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low 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  
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wetbrushing and place in container for disposal according to local regulations (see section 13).
- 6.4 Reference to other sections  
For disposal see section 13.

## 7. HANDLING AND STORAGE

- 7.1 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 build up of electrostatic charge.  
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.  
Store under inert gas. hygroscopic
- 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  
Ingredients with workplace control parameters  
Contains no substances with occupational exposure limit values.
- 8.2 Exposure controls  
Appropriate engineering controls  
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.  
Personal protective equipment  
Eye/face protection  
Tightly fitting safety goggles. Faceshield (8-inch minimum). 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.  
The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.  
Body Protection  
Complete suit protecting against chemicals, Flame retardant antistatic protective 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 fullface 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
  - 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 193 °C - lit.
  - g) Flash point 57.20 °C - closed cup
  - h) Evaporation rate No data available
  - i) Flammability (solid, gas) No data available
  - j) Upper/lower flammability or explosive limits  
Upper explosion limit: 4.90 %(V)  
Lower explosion limit: 0.70 %(V)
  - k) Vapor pressure 56 hPa at 92.00 °C  
988 hPa at 188.00 °C
  - l) Vapor density No data available
  - m) Relative density 1.012 g/mL at 25 °C 1.012 g/cm<sup>3</sup> at 25 °C
  - n) Water solubility No data available
  - o) Partition coefficient: n-octanol/water log Pow: 4.790
  - p) Autoignition 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
- 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  
Heat, flames and sparks.
- 10.5 Incompatible materials  
Oxidizing agents
- 10.6 Hazardous decomposition products  
No data available  
Hazardous decomposition products formed under fire conditions. - Carbon oxides  
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects  
Acute toxicity  
LD50 Oral - Rat - 4,170 mg/kg  
LC50 Inhalation - Rat - 4.00 h - 710 ppm  
LD50 Dermal - Rabbit - 5,286 mg/kg  
Skin corrosion/irritation  
Skin - Rabbit  
Result: Severe skin irritation  
Serious eye damage/eye irritation  
Eyes - Rabbit  
Result: No eye irritation  
Respiratory or skin sensitization  
No data available  
Germ cell mutagenicity  
Carcinogenicity  
IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

No ingredient 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

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

Additional Information

RTECS: Not available

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 LC50 - *Leuciscus idus* (Golden orfe) - 4.3 mg/l - 48.0 h

12.2 Persistence and degradability

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Toxic to aquatic life with long lasting effects.

No data available

## 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. 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: 1147 IMDG: 1147 IATA: 1147

14.2 UN proper shipping name

ADR/RID: DECAHYDRONAPHTHALENE

IMDG: DECAHYDRONAPHTHALENE

IATA: Decahydronaphthalene

14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

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

14.6 Special precautions for user

No data available

## 15. REGULATORY INFORMATION

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

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

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dangerous substances, preparations and articles  
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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!