

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) Classifications according to Regulation (EC) No 1272/2008. Printdate 14 May 2024

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

1.1. Product name:

D10-1-Butanol

1.1. Catalog No.:

685706

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical uses: R&D

uses:

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
Flammable liquids (Category 3), H226
Acute toxicity, Oral (Category 4), H302
Skin irritation (Category 2), H315
Serious eye damage (Category 1), H318
Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

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)

H226 Flammable liquid and vapour. H302 Harmful if swallowed. H315 Causes skin irritation.

H318 Causes serious eye damage. H335 May cause respirátory irritation.

H336 May cause drowsiness or dizziness. H335 + H336 May cause respiratory irritation, and drowsiness or dizziness.

Precautionary statement(s)

P260 Avoid breathing vapours.

P280 Wear protective gloves/ eye protection/ face protection.

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: Butyl alcohol-d10

Butyl alcohol-d10 Formula : C4D10O

Molecular weight : 84,08 g/mol CAS-No. : 34193-38-9

Component Classification Concentration

T-Butanol-d10
Flam. Liq. 3; Acute Tox. 4;
Skin Irrit. 2; Eye Dam. 1;
STOT SE 3; H226, H302,
H315, H318, H335, H336 Concentration limits: >= 20 %: STOT SE 3, H335; >= 20 %: STOT SE 3, H336: <= 100 %

3.1.1. Formula

C4D10O



84.18

3.1.3. CAS-No.

34193-38-9

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

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 hazzards 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



Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours 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 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

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 vapour 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

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form: clear, 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: -89,99 °C f) Initial boiling point

and boiling range 116 - 118 °C

g) Flash point 34 °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 No data available
l) Vapour density No data available
m) Relative density 0,92 g/mL at 25 °C0,92 g/cm3 at 25 °C
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 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 No data available 10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
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
No data available Skin corrosion/irritation No data available Serious eye damage/eye irritation Respiratory or skin sensitisation No data available Germ cell mutagenicity Carcinogenicity

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
Specific target organ toxicity - single exposure
May cause respiratory irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.



Specific target organ toxicity - repeated exposure No data available Aspiration hazard No data available Additional Information

RTECS: Not available Central nervous system depression, Gastrointestinal disturbance, drying, cracking of the skin, Skin irritation

12. ECOLOGICAL INFORMATION

12.1 Toxicity No data available
12.2 Persistence and degradability
No data available 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 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 Dispose of as unused product

14. TRANSPORT INFORMATION

14.1 UN number ADR/RID: 1120 IMDG: 1120 IATA: 1120 14.2 UN proper shipping name ADR/RID: BUTANOLS IMDG: BUTANOLS IATA: Butanols 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: no IMDG Marine pollutant: no 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 safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. 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!