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Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) Classifications according to Regulation (EC) No 1272/2008. Printdate 21 Nov 2022

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

1.1. Product name:

Ethyl-d5 alcohol-d, anhydrous

1.1. Catalog No.:

1098

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical uses: R&D

1.3. Uses advised against:

HPC Standards GmbH Permoserstrasse 15

04318 Leipzig Germany

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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 2), H225

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)
H225 Highly flammable liquid and vapour. Precautionary statement(s)
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Supplemental Hazard Statements 2.3 Other hazards This substance/mixture contains no components considered to be either persistent,

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bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative and toxic (PBT).

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

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Synonyms: Hexadeuteroethanol
Ethyl alcohol-d6
Ethyl-d5 alcohol-d
Formula: C2D6O
Molecular weight: 52,12 g/mol
CAS-No.: 1516-08-1
EC-No.: 216-162-2
No components need to be disclosed according to the applicable regulations

3.1.1. Formula

C2D6O

3.1.2. Molecular Weight (g/mol)

52.11

3.1.3. CAS-No.

1516-08-1

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.

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If inhaled

If breathed in, move person into fresh air. If not breathing, gwewartificial 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.

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
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

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 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.

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7.2 Conditions for safe storage, including any incompatibalities @armar-europa.de Store in cool place. Keep container tightly closed in a dry and well well are 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 Face shield and safety glasses 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 Impervious clothing, 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Information on basic physical and chemical properties
- a) Appearance Form: liquid
 b) Odour No data available
- c) Odour Threshold No data available
 d) pH No data available
 e) Melting

point/freezing point No data available

- f) Initial boiling point 78 °C lit. and boiling range g) Flash point 14 °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

- I) Vapour density No data available
- m) Relative density 0,892 g/mL at 25 °C n) Water solubility No data available
- o) Partition coefficient:

n-octanol/water

No data available

p) Auto-ignition

témperature

No data available

g) Decomposition

témperature

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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, Peroxides, Acids, Acid chlorides, Acid anhydrides, Alkali metals
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
No data available
Respiratory or skin sensitisation
No data available
Germ cell mutagenicity
No data available
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
No data available
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: Not available Central nervous system depression, Damage to the heart

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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.

14. TRANSPORT INFORMATION

14.1 UN number ADR/RID: 1170 IMDG: 1170 IATA: 1170 14.2 UN proper shipping name ADR/RID: ETHANOL IMDG: ETHANOL
IMDG: ETHANOL
IATA: Ethanol
14.3 Transport hazard class(es)
ADR/RID: 3 IMDG: 3 IATA: 3 14.4 Packaging group
ADR/RID: II IMDG: II IATA: II
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

ARMARISOTOPES

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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!