ZEOCHEM®

S A F E T Y D A T A S H E E T

according to Regulation (EC) No. 1907/2006
(amended by Regulation (EU) 2015/830)

Benzene-d6

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	Benzene-d6
CAS-No.	1076-43-3
EC-No.	214-061-8
Product code	None.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture	Solvent for NMR spectroscopy For industrial application only.

1.3. Details of the supplier of the safety data sheet

Company/Undertaking Identification	Zeochem AG, www.zeochem.ch Joweid 5, 8630 Rüti, Schweiz Tel.: +41 44 922 93 93 E-Mail: info@zeochem.ch
1.4. Emergency telephone number	Tox-Zentrum Zürich : 145 / +41 44 251 51 51 [24h/7d]
Issuing date	05.10.2018
Version	GHS 5 (Previous versions: GHS 4)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008

Serious eye damage/eye irritation, Cat. 2, H319
Skin corrosion/irritation, Cat. 2, H315
Specific target organ toxicity (repeated exposure, inhalation), Cat. 1, H372
Specific target organ toxicity (repeated exposure, dermal), Cat. 1, H372
Specific target organ toxicity (repeated exposure, oral), Cat. 1, H372
Aspiration hazard, Cat. 1, H304
Flammable liquids, Cat. 2, H225

Additional information

For the full text of the phrases mentioned in this Section, see Section 16.

2.2. Label elements

Signal Word

Danger

Hazard Statements

H225: Highly flammable liquid and vapour.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H372: Causes damage to organs through prolonged or repeated exposure in contact with skin.
H372: Causes damage to organs through prolonged or repeated exposure if inhaled.
H372: Causes damage to organs through prolonged or repeated exposure if swallowed.

Precautionary statements

P210b: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P243: Take precautionary measures against static discharge.
P260: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264b: Wash face, hands and any exposed skin thoroughly after handling.
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314: Get medical advice/ attention if you feel unwell.
P331: Do NOT induce vomiting.
P370+P378data: In case of fire: Use carbon dioxide (co2) for extinction.
P501: Dispose of contents/ container to an approved waste disposal plant.

Supplemental information None.

Product identifier Benzene-d6, CAS-No. 1076-43-3, EC-No. 214-061-8

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

3.1. Substances

Components		Product identifier
Benzene-d6	> 90%	CAS-No.: 1076-43-3 EC-No.: 214-061-8

For the full text of the phrases mentioned in this Section, see Section 16.

Hazardous impurities None known.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Move to fresh air. Consult a physician after significant exposure.

Skin contact Wash with water and soap as a precaution.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

Ingestion Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. If swallowed, seek medical advice immediately and show this container or label.

4.2. Most important symptoms and effects, both acute and delayed None known.

4.3. Indication of any immediate medical attention and special treatment needed None known.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use dry chemical, CO2, water spray or alcohol foam.

Extinguishing media which must not be used for safety reasons High volume water jet.

5.2. Special hazards arising from the substance or mixture	Solvents may produce excessive pressure under fire-conditions. Sealed containers may rupture and ignite. Cool containers / tanks with water spray. Burning produces irritant fumes.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Standard procedure for chemical fires.
Specific methods	Do not use a solid water stream as it may scatter and spread fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel	Remove all sources of ignition. Pay attention to flashback.
Advice for emergency responders	Handle in accordance with good industrial hygiene and safety practice.
6.2. Environmental precautions	Do not flush into surface water or sanitary sewer system.
6.3. Methods and material for containment and cleaning up	Clean up promptly by sweeping or vacuum. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded.
7.2. Conditions for safe storage, including any incompatibilities	Keep containers tightly closed in a dry, cool and well-ventilated place.
7.3. Specific end use(s)	No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit(s)	MAK (Maximale Arbeitsplatzkonzentration): 0.5 ppm.

8.2. Exposure controls

Appropriate engineering controls	Avoid contact with skin, eyes and clothing.
Personal protection equipment	
Respiratory protection	In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.
Hand protection	Gloves made of VITON.
Eye protection	Safety glasses.
Skin and body protection	Wear as appropriate: Solvent-resistant apron and boots.
Thermal hazards	No special measures required.
Environmental exposure controls	No special measures required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colourless.
Odour	Aromatic.
Odour Threshold	Not determined.
pH:	Not determined.
Melting point/range:	6°C
Boiling point/range:	80°C
Flash point:	-11°C
Evaporation Rate:	Not determined.
Flammability:	Not determined.
Explosion limits:	8.6% / 1.2%
Vapour pressure:	100 mbar/20°C
Vapor density:	2.7
Relative density:	0.88 g/ml
Water solubility:	1.8 g/l (20°C)
Partition coefficient (n-octanol/water):	2.13
Autoignition temperature:	555°C
Decomposition temperature:	> 600°C
Viscosity:	Not determined.
Explosive properties:	liquid, flammable
Oxidising properties:	None

9.2. Other information

General Product Characteristics	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity	No information available.
10.2. Chemical stability	No decomposition if used as directed.
10.3. Possibility of hazardous reactions	No information available.
10.4. Conditions to avoid	Do not freeze. Heating in air.
10.5. Incompatible materials	Incompatible with oxidizing agents.
10.6. Hazardous decomposition products	None under normal use.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	LD50/oral/rat = 930 mg/kg. LD50/dermal/rabbit = 8260 mg/kg.
Skin corrosion/irritation	Slight skin irritation.
Serious eye damage/eye irritation	Moderate eye irritation.
Respiratory / Skin Sensitisation	No data available.
Carcinogenicity	Known carcinogen.
Germ cell mutagenicity	Possible mutagen.
Reproductive toxicity	Fertility classification not possible from current data.
Specific target organ toxicity (single exposure)	No data available.
Specific target organ toxicity (repeated exposure)	No data available.
Aspiration hazard	No data available.
Human experience	Potential cancer hazard. CMR effects.

SECTION 12: Ecological information

12.1. Toxicity	LC50/24h/daphnia = 200 mg/l. LC50/48h/golden orfe = 33 mg/l. LC50/24h/goldfish = 46 mg/l. EC50/72h/algae = 29 mg/l.
12.2. Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential	Does not bioaccumulate.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	No information available.
12.6. Other adverse effects	No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products	Can be incinerated, when in compliance with local regulations.
Contaminated packaging	Offer rinsed packaging material to local recycling facilities.

SECTION 14: Transport information

ADR/RID	UN 1114. Proper shipping name: BENZENE. Class 3. Packing group II. ADR/RID-Labels 3. Classification code F1. Hazard identification no. 33. Limited quantity 1 L. Excepted quantity E2. Tunnel restriction code D/E
IMDG	UN 1114. Proper shipping name: BENZENE. Class 3. Packing group II. IMDG-Labels 3. Limited quantity 1 L. Excepted quantity E2. EmS F-E, S-D. Marine pollutant: No.
IATA	UN 1114. Proper shipping name: Benzene. Class 3. Packing group II. IATA label 3. Packing instruction (passenger aircraft): 353 (5 L). Packing instruction (LQ): Y341 (1 L). Packing instruction (cargo aircraft): 364 (60 L).

Inland navigation ADN	UN 1114. Proper shipping name: BENZENE. Class 3. Packing group II. ADN labels 3. Classification code F1. Limited quantity 1 L. Excepted quantity E2.
Further Information	None.

SECTION 15: Regulatory information

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

Regulatory Information	The product is classified and labelled according to Regulation (EC) No. 1272/2008.
15.2. Chemical safety assessment	Not required.

SECTION 16: Other information

Key or legend to abbreviations and acronyms	CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS) MAK: Occupational exposure limit.
Full text of phrases referred to under sections 2 and 3	H225: Highly flammable liquid and vapour. H304: May be fatal if swallowed and enters airways. H315: Causes skin irritation. H319: Causes serious eye irritation. H372: Causes damage to organs through prolonged or repeated exposure if inhaled. H372: Causes damage to organs through prolonged or repeated exposure if swallowed. H372: Causes damage to organs through prolonged or repeated exposure in contact with skin.
Further information	Take notice of the directions of use on the label.
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification.