

SAFETY DATA SHEET

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

Deuterium oxide

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

1.1. Product identifier

Product name	Deuterium oxide
CAS-No.	7789-20-0
EC-No.	232-148-9
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
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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
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1.4. Emergency telephone number	Tox-Zentrum Zürich : 145 / +41 44 251 51 51 [24h/7d]
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Version	GHS 4 (Previous versions: GHS 3)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008	The substance or mixture is not classified.
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Additional information	For the full text of the phrases mentioned in this Section, see Section 16.
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2.2. Label elements

Signal Word	None.
Hazard Statements	None.
Precautionary statements	None.
Supplemental information	None.
Product identifier	Deuterium oxide, CAS-No. 7789-20-0, EC-No. 232-148-9
2.3. Other hazards	None known.

SECTION 3: Composition/information on ingredients

3.1. Substances

Components		Product identifier
Deuterium oxide	> 90%	CAS-No.: 7789-20-0 EC-No.: 232-148-9

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	No special measures required.
Skin contact	No special measures required.
Eye contact	No special measures required.
Ingestion	Drink water as a precaution.

4.2. Most important symptoms and effects, both acute and delayed The product contains no substances known to be hazardous to health in concentrations which need to be taken into account.

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 No special measures required.

Extinguishing media which must not be used for safety reasons None.

5.2. Special hazards arising from the substance or mixture None.

5.3. Advice for firefighters

Special protective equipment for firefighters Not required.

Specific methods No special measures required.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel No special measures required.

Advice for emergency responders Handle in accordance with good industrial hygiene and safety practice.

6.2. Environmental precautions No special environmental precautions required.

6.3. Methods and material for containment and cleaning up No information available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling No special technical protective measures required.

7.2. Conditions for safe storage, including any incompatibilities Store at room temperature in the original container.

7.3. Specific end use(s) No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit(s) No data is available on the product itself.

8.2. Exposure controls

Appropriate engineering controls General industrial hygiene practice.

Personal protection equipment

Respiratory protection No special protective equipment required.

Hand protection No special measures required.

Eye protection Avoid contact with eyes.

Skin and body protection No special measures required.

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	None.
Odour Threshold	Not determined.
pH:	7
Melting point/range:	4°C
Boiling point/range:	101°C
Flash point:	Not determined.
Evaporation Rate:	Not determined.
Flammability:	Not determined.
Explosion limits:	Not determined.
Vapour pressure:	Not determined.
Vapor density:	Not determined.
Relative density:	1.11 g/ml
Water solubility:	completely miscible
Partition coefficient (n-octanol/water):	Not determined.
Autoignition temperature:	Not determined.
Decomposition temperature:	Not determined.
Viscosity:	Not determined.
Explosive properties:	not hazardous
Oxidising properties:	None

9.2. Other information

General Product Characteristics No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity No information available.

Deuterium oxide

Print Date 09.10.2018

GHS 4

4 / 7

10.2. Chemical stability	Stable.
10.3. Possibility of hazardous reactions	No information available.
10.4. Conditions to avoid	Not required.
10.5. Incompatible materials	None.
10.6. Hazardous decomposition products	None reasonably foreseeable.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	None.
Skin corrosion/irritation	No data available.
Serious eye damage/eye irritation	No data available.
Respiratory / Skin Sensitisation	None.
Carcinogenicity	No data available.
Germ cell mutagenicity	No data available.
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.
Human experience	This product has no known adverse effect on human health.

SECTION 12: Ecological information

12.1. Toxicity	None.
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 used without re-conditioning.

Contaminated packaging Clean drums may be recycled.

SECTION 14: Transport information

ADR/RID Not regulated.

IMDG Not regulated.

IATA Not regulated.

Further Information Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

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

Regulatory Information In accordance with Regulation (EC) No. 1272/2008, the product does not need to be classified nor labelled.

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)

Full text of phrases referred to under sections 2 and 3 None.

Further information Not relevant.

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.