

**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Revision: 13.07.2010

Printing date 13.07.2010

**1 Identification of substance****Product details**

**Trade name:** Water, deuterium depleted  
**Stock number:** 42369  
**Manufacturer/Supplier:** Alfa Aesar GmbH & Co.KG  
Benzstrasse 3  
D-76185 Karlsruhe / Germany  
**Informing department:** Product safety department.  
**Emergency information:** Giftnotruf Universität Mainz / Poison Information Center Mainz  
www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240

E-mail: gcat@matthey.com  
www.alfa-chemcat.com

**2 Hazards identification**

**Hazard designation:** void  
**Information pertaining to particular dangers for man and environment** Not applicable  
**GHS label elements** Void

**3 Composition/information on ingredients**

**Chemical characterization:**  
**Designation: (CAS#)** Water (CAS# 7732-18-5): 100%  
**Identification number(s):**  
**EINECS Number:** 231-791-2

**4 First aid measures**

**General information** No special measures required.

**5 Fire fighting measures**

**Suitable extinguishing agents** Use fire fighting measures that suit the environment.  
**Protective equipment:** No special measures required.

**6 Accidental release measures**

**Person-related safety precautions:** Not required.  
**Measures for environmental protection:** No special measures required.  
**Measures for cleaning/collecting:** No special measures required.  
**Additional information:** See Section 7 for information on safe handling  
See section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

**7 Handling and storage**

**Handling**  
**Information for safe handling:** No special measures required.  
**Information about protection against explosions and fires:** No special measures required.  
**Storage**  
**Requirements to be met by storerooms and containers:** No special requirements.  
**Information about storage in one common storage facility:** Aqueous solutions are incompatible with alkali and alkaline earth metals and many reactive organic and inorganic chemicals.  
**Further information about storage conditions:** None.

**8 Exposure controls and personal protection**

**Additional information about design of technical systems:** No further data; see item 7.  
**Components with critical values that require monitoring at the workplace:** Not required.  
**Additional information:** No data  
**Personal protective equipment**  
**General protective and hygienic measures** The usual precautionary measures should be adhered to in handling the chemicals.  
**Breathing equipment:** Not required.  
**Protection of hands:** Not required.  
**Eye protection:** Safety glasses  
**Body protection:** Protective work clothing.

**9 Physical and chemical properties:****General Information**

**Form:** Liquid  
**Colour:** Colourless  
**Smell:** Odourless

**Change in condition**

**Melting point/Melting range:** 0°C  
**Boiling point/Boiling range:** 100°C  
**Sublimation temperature / start:** Not determined

**Flash point:** Not determined

**Ignition temperature:** Not determined

**Decomposition temperature:** Not determined

**Danger of explosion:** Product is not explosive.

**Critical values for explosion:**

**Lower:** Not determined  
**Upper:** Not determined

**Steam pressure at 20°C:** 23 hPa

**Density at 20°C** 1 g/cm<sup>3</sup>

**10 Stability and reactivity**

**Thermal decomposition / conditions to be avoided:** No decomposition if used and stored according to specifications.

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Trade name **Water, deuterium depleted**

<b>Materials to be avoided:</b>	Aqueous solutions are incompatible with alkali and alkaline earth metals and many reactive organic and inorganic chemicals.	(Contd. of page 1)
<b>Dangerous reactions:</b>	Reacts with certain metals Reacts with alkaline earth metals Reacts with alkaline metals	
<b>Dangerous products of decomposition:</b>	Hydrogen Oxygen	

**11 Toxicological information****Acute toxicity:****LD/LC50 values that are relevant for classification:**

Oral	LD50	>90 mL/kg (rat)
	LDLo	320 gm/kg (cat)
		629 gm/kg (dog)
		429 gm/kg (guinea pig)
		368 gm/kg (rabbit)

**Primary irritant effect:****on the skin:****on the eye:****Sensitization:****Additional toxicological information:**

No irritant effect.  
No irritant effect.  
No sensitizing effect known.  
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.  
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

**12 Ecological information:****Additional ecological information:****General notes:**

void  
Water hazard class 1 (Self-assessment): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.  
Do not allow material to be released to the environment without proper governmental permits.

**13 Disposal considerations****Product:****Recommendation**

void  
Hand over to disposers of hazardous waste.  
Must be specially treated under adherence to official regulations.

**Uncleaned packagings:****Recommendation:**

void

**14 Transport information****Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)****ADR/RID-GGVS/E Class:**

None

**Maritime transport IMDG/GGVSea:****IMDG/GGVSea Class:**

None

**Marine pollutant:**

No

**Air transport ICAO-TI and IATA-DGR:****ICAO/IATA Class:**

None

**Transport/Additional information:**

Not dangerous according to the above specifications.

**15 Regulatory information****Designation according to EC guidelines:**

Observe the normal safety regulations when handling chemicals  
The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV).

**National regulations****Information about limitation of use:**

For use only by technically qualified individuals.

**Water hazard class:**

Water hazard class 1 (Self-assessment): slightly hazardous for water.

**16 Other information:**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**Department issuing data specification sheet:****Contact:****Abbreviations and acronyms:**

Health, Safety and Environmental Department.  
Zachariah Holt  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent