

GB

1 / 6

Revision: 27.07.2005 Replaces the version of: 19.12.2002 PDF date: 21.05.2007

Brake Fluid DOT 4 1L

Art.: 08920091

## Safety Data Sheet according to EC-Regulation 91/155/EEC

### 1. Identification of the substance/preparation and of the company/undertaking

#### Identification of the substance or preparation

**Brake Fluid DOT 4 1L****Art.: 08920091**

#### Use of the substance/preparation

Refer to description of material or preparation.

#### Company/undertaking identification

Wurth UK Ltd 1 Centurion Way, Erith, UK-DA18 4AE Kent  
Telephone 020 8319 6000, Fax 020 8319 6400

Distributor: see point 16 of this EC safety data sheet

#### Emergency telephone / Office for advice

##### Advisory office in case of poisoning:

Tel.: +49 30 / 19240 Berlin

##### Telephone number of the company in case of emergencies:

Tel. 020 8319 6000 (08-00 h - 18-00 h)

### 2. Composition/information on ingredients

2.1 Chemical name	content %	symbol	R-phrases	EINECS, ELINCS
Alkoxy ether alcohol	1 -< 20	Xi	36	310-287-7
Diethylene glycol	1 - 5	Xn	22	203-872-2

For complete wording of the R-phrases, refer to point 16.

### 3. Hazards identification

#### 3.1 To people

See point 11 and 15.

Preparation is not classified as hazardous in the sense of directive 1999/45/EC.

#### 3.2 To the environment

See point 12.

### 4. First aid measures

#### 4.1 Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

#### 4.2 Eye contact

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Keep Data Sheet available.

#### 4.3 Skin contact

Wash thoroughly with soap and copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

#### 4.4 Ingestion

Call doctor immediately - have Data Sheet available.

Rinse the mouth thoroughly with water.

Give copious water to drink - consult doctor immediately.

GB

2 / 6

Revision: 27.07.2005 Replaces the version of: 19.12.2002 PDF date: 21.05.2007

Brake Fluid DOT 4 1L

Art.: 08920091

Never pour anything into the mouth of an unconscious person!

**4.5 Special resources necessary for first aid**

n.c.

**5. Fire-fighting measures****5.1 Suitable extinguishing media**

Alcohol resistant foam

Dry extinguisher

Water mist

Cool container at risk with water.

**5.2 Extinguishing media which must not be used for safety reasons**

High volume water jet

**5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases**

In case of fire the following can develop:

Oxides of carbon

Toxic gases

**5.4 Special protective equipment for fire-fighters**

Protective respirator with independent air supply

According to size of fire

Full protection, if necessary

**5.5 Further information**

Dispose of contaminated extinction water according to official regulations.

**6. Accidental release measures**

Refer to point 13. and for personal protection refer to point 8.

**6.1 Personal precautions**

Avoid inhalation, and contact with eyes or skin.

Do not carry cleaning cloths soaked in product in trouser pockets.

If applicable, caution - risk of slipping.

**6.2 Environmental measures**

If leakage occurs, dam up.

Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

**6.3 Methods for cleaning up**

Collect using absorbant material (e.g. Universal binding medium), and dispose of according to point 13.

Flush residue using copious water.

**7. Handling and storage****7.1 Handling****Tips for safe handling:**

See point 6.1

Avoid aerosol formation.

Ensure good ventilation.

General hygiene measures for the handling of chemicals are applicable.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Wash hands before breaks and at end of work.

Observe directions on label and instructions for use.

**7.2. Storage****Requirements for storage rooms and containers:**

Not to be stored in gangways or stair wells.

Store products only unopened, in original packing.

Suitable container:

Stainless steel (alloy steel)

3 / 6

Revision: 27.07.2005 Replaces the version of: 19.12.2002 PDF date: 21.05.2007  
Brake Fluid DOT 4 1L  
Art.: 08920091

**Special storage conditions:**

See point 10.2  
Protect against moisture and store closed.

**8. Exposure controls/personal protection**

Chemical Name	Diethylene glycol
WEL-TWA: 23 ppm (101 mg/m <sup>3</sup> )	WEL-STEL: ---
BMGV: ---	Other information: ---

Chemical Name	Diethylene glycol
WEL-TWA: 23 ppm (101 mg/m <sup>3</sup> )	WEL-STEL: ---
BMGV: ---	Other information: ---

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.  
\*\* = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

OELV-8h = Occupational Exposure Limit Value (8-hour reference period) | OELV-15min = Occupational Exposure Limit Value (15-minute reference period) | BLV = Biological limit value | Other information: C1, C2 = carcinogenic substance, Cat. 1 or 2. Mut 1, 2 = mutagenic substance, Cat. 1 or 2. Repro 1, 2 = Substances known to be toxic for reproduction, Cat. 1 or 2. Sk = can be absorbed through skin. Asphyx = asphyxiant. Sen = Respiratory sensitizer.  
\*\* = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Respiratory protection: Normally not necessary.

If OES or MEL is exceeded.

Filter A P 3 (EN 141)

Hand protection:

Protective gloves in butyl rubber (EN 374).

Protective PVC gloves (EN 374)

Protective hand cream recommended.

Eye protection:

With long-term contact:

Tight fitting protective goggles (EN 166) with side protection, with danger of projections.

Protective working garments (e.g. safety shoes EN 344, long-sleeved protective working garments)

Skin protection:

Additional information on hand protection - No tests have been performed.

Selection made for preparations according to the best available knowledge and information on the ingredients.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

**9. Physical and chemical properties**

Physical state:	Liquid
Colour:	Yellow
Odour:	Mild
pH-value undiluted:	7 - 10,5 (SA J 1703)
Boiling point/range (°C):	> 260 (SAE J 1703)
Melting point/range (°C):	> - 50 (SAE J 1703)
Flash point (°C):	> 100 (SAE J 1703)
Autoflammability:	> 300°C (ASTM D 286)

GB

4 / 6

Revision: 27.07.2005 Replaces the version of: 19.12.2002 PDF date: 21.05.2007

Brake Fluid DOT 4 1L

Art.: 08920091

Minimum limit of explosion:	n.a.
Maximum limit of explosion:	n.a.
Vapour pressure:	> 2 mbar (20°C)
Density (g/ml):	1,04 - 1,09 (20°C)
Solubility in water:	Soluble
Partition coefficient (n-octanol/water):	log Pow < 2 (OECD 117), (Particulars of main substances contained)
Viscosity:	~ 5 - 10 cSt (20°C) (ASTM D 445)

## 10. Stability and reactivity

### Conditions to avoid

See point 7

Stable when handled and stored correctly.

Protect from humidity.

Product is hygroscopic.

Open flame, ignition sources

Can form explosive peroxides.

### Materials to avoid

See point 7

Avoid contact with strong oxidizing agents.

Avoid contact with other chemicals.

### Hazardous decomposition products

See point 5.3

## 11. Toxicological information

### Acute toxicity and immediate effects

Ingestion, LD50 rat oral (mg/kg):	>= 5000
Inhalation, LC50 rat inhal.(mg/l/4h):	n.av.
Skin contact, LD50 rat dermal (mg/kg):	> 2000
Eye contact:	Mild irritant

### Delayed and chronic effects

Sensitization:	No indications of such an effect.
Carcinogenicity:	No indications of such an effect.
Mutagenicity:	No indications of such an effect.
Reproductive toxicity:	n.c.
Narcosis:	n.c.

### Further information

No classification according to calculation procedure.

The following may occur:

Irritation of the eyes

Irritation of the respiratory tract

With long-term contact:

Product removes fat

Dermatitis (skin inflammation)

Ingestion of large quantities:

Kidney damage

Coma

Death

## 12. Ecological information

Water hazard class (Germany):	Not classified
Self classification:	n.a.
Persistence and degradability:	k.D.v.
Readily biodegradable (100%/21d OECD 302B)	
AOX:	
According to the recipe, contains no AOX.	
Behaviour in sewage plants:	Problems not expected when used correctly.

GB

5 / 6

Revision: 27.07.2005 Replaces the version of: 19.12.2002 PDF date: 21.05.2007

Brake Fluid DOT 4 1L

Art.: 08920091

Aquatic toxicity:

Toxicity to fish:

LC50 Oncorhynchus mykiss  $\geq$  100 mg/l/96h

Ecological toxicity:

n.av.

Mobility:

No adsorption in soil.

Accumulation:

Not accepted owing to the logP values of the components.

### 13. Disposal considerations

#### 13.1. for the material / preparation / residue

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of. EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2001/118/EC, 2001/119/EC, 2001/573/EC)

16 01 13 brake fluids

Recommendation:

Pay attention to local and national official regulations

E.g. dispose at suitable refuse site.

E.g. suitable incineration plant.

#### 13.2 for contaminated packing material

See point 13.1

Pay attention to local and national official regulations

Untampered packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

### 14. Transport information

#### General statements

UN-Number: n.a.

#### Road/Rail-transport (ADR/RID)

Class/packing-group: n.a.

Classification code: n.a.

LQ: n.a.

#### Transport by sea

IMDG-code: n.a. (class/packing-group)

Marine Pollutant: n.a.

#### Transport by air

IATA: n.a. (class/secondary danger/packing-group)

#### Additional information:

Non-dangerous material according to Transport Regulations.

### 15. Regulatory information

#### Classification according to Dangerous Product Regulations incl. EC Directives (67/548/EEC and 1999/45/EC)

Symbols: Not applicable

Indications of danger: ---

R-phrases:

S-phrases:

Additions:

Safety data sheet available for professional user on request.

Observe restrictions: n.a.

VOC 1999/13/EC n.a.

### 16. Other information

These details refer to the product as it is delivered.

GB

6 / 6

Revision: 27.07.2005 Replaces the version of: 19.12.2002 PDF date: 21.05.2007

Brake Fluid DOT 4 1L

Art.: 08920091

Storage class VCI (Germany):

10

Revised points:

1 - 16

The following phrases represent the prescribed R-phrases for the ingredients (designated in point 2).

36 Irritating to eyes.

22 Harmful if swallowed.

Winzer Würth Industrial Lt.

Würth House

Catteshall Lane

GB - Godalming / Surrey

GU7 1NP

Tel: 01483 412800

Fax: 01483 412805

Würth Ireland Ltd.

Monaclinoe Industrial Estate

Ballysimon Road

GB - Limerick / Ireland

Tel:+353 61 430200

Fax: +353 61 430200

**Legend:**

n.a. = not applicable / n.v., k.D.v. = n.av. = not available / n.g. = n.c. = not checked

WEL = Workplace Exposure Limit EH40, TWA = Long-term exposure limit (8-hour TWA (= time weighted average) reference

period), STEL = Short-term exposure limit (15-minute reference period) / BMGV = Biological monitoring guidance value EH40

AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany) / BGW = "Biologischer Grenzwert" (biological limit value, Germany)

VbF = Regulations for flammable liquids (Austria)

WGK = water hazard class (Germany) - WGK 3 = very hazardous, WGK 2 = hazardous, WGK 1 = slightly hazardous to water

VOC = Volatile organic compounds / AOX = Adsorbable organic halogen compounds

VwVwS = Administrative Order relating to substances hazardous to water (Germany)

The statements made here should describe the product with regard to the necessary safety precautions - they are

not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by:

**Chemical Check GmbH, Beim Staumberge 3, D-32839 Steinheim, Tel.: +49 5233 94 17 0, +49 1805-****CHEMICAL / +49 180 52 43 642, Fax: +49 5233 94 17 90, +49 180 50 50 455**

© by Chemical Check GmbH Gefahrstoffberatung. The copying or changing of this document

is forbidden except with consent of the Chemical Check GmbH Gefahrstoffberatung.