

according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Brake fluid DOT4

Revision date: 3/8/2023 Version: 2.2 Replaces version: 2.1 Language: en-GB Date of print: 3/8/2023

Page: 1 of 12

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

1.1 Product identifier

Trade name: Brake fluid DOT4

This safety data sheet pertains to the following products:

344024 = Brake fluid DOT4 408526 = Brake Fluid DOT4 408528 = Brake Fluid DOT4 60729 = Brake fluid DOT4 60737 = Brake Fluid DOT4 60738 = Brake Fluid DOT4 60739 = Brake Fluid DOT4 60740 = Brake Fluid DOT4

UFI: UTDG-05NH-710N-0CVE

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

General use: Brake liquid

For commercial user only

1.3 Details of the supplier of the safety data sheet

Company name: Berner Produkten b.v.
Street/POB-No.: Vogelzankweg 175
Postal Code, city: 6374 AC Landgraaf

Netherlands

 www.berner.nl

 E-mail:
 info@berner.nl

 Telephone:
 +31 45 53 39 133

Department responsible for information:

E-mail: Productsafety.Chemicals@berner-group.com

1.4 Emergency telephone number

Poisons information service:

National Poisons Information Service (Birmingham Unit): 844 892 0111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Repr. 2; H361d Suspected of damaging the unborn child.

2.2 Label elements

Labelling (CLP)



Signal word: Warning

Hazard statements: H361d Suspected of damaging the unborn child.



according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Brake fluid DOT4

Revision date: 3/8/2023 Version: 2.2 Replaces version: 2.1 Language: en-GB Date of print: 3/8/2023

2 of 12

Page:

Precautionary statements: P201 Obtain special instructions before use.

P280 Wear protective gloves/protective clothing/eye protection.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

Special labelling

EUH208 Contains Dihydro-3-(tetrapropenyl)furan-2,5-dione. May produce an allergic

reaction

Text for labelling: Contains:

Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl]orthoborate

2-(2-Methoxyethoxy)ethanol

2.3 Other hazards

Special danger of slipping by leaking/spilling product.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

No data available

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: Mixture of the substances listed below with non-hazardous additions:

Hazardous ingredients:

Identifiers	Designation Classification	Content
REACH 01-2119462824-33-xxxx EC No. 250-418-4 CAS 30989-05-0	Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl]orthoborate Repr. 2; H361d.	< 30 %
REACH 01-2119457857-21-xxxx EC No. 203-872-2 CAS 111-46-6	Diethylene glycol Acute Tox. 4; H302.	< 10 %
REACH 01-2119475107-38-xxxx EC No. 205-592-6 CAS 143-22-6	2-[2-(2-Butoxyethoxy)ethoxy]ethanol Eye Dam. 1; H318.	< 10 %
REACH 01-2119475100-52-xxxx EC No. 203-906-6 CAS 111-77-3	2-(2-Methoxyethoxy)ethanol Repr. 1B; H360D. Specific concentration limits (SCL): Repr. 1A; H360D: C ≥ 3 %	< 3 %
REACH 01-2119979080-37-xxxx EC No. 247-781-6 CAS 26544-38-7	Dihydro-3-(tetrapropenyl)furan-2,5-dione Eye Irrit. 2; H319. Skin Sens. 1A; H317. Aquatic Chronic 4; H413.	< 0.1 %

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: First aider: Pay attention to self-protection! If medical advice is needed, have product container

or label at hand. Take off contaminated clothing and wash it before reuse.

In case of inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for

breathing. Seek medical treatment in case of troubles.



according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Brake fluid DOT4

Revision date: 3/8/2023 Version: 2.2 Replaces version: 2.1 Language: en-GB Date of print: 3/8/2023

age: 3 of 12

Following skin contact: Immediately clean with water and soap followed by thorough rinsing. In case of skin reactions,

consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart.

Remove contact lenses, if present and easy to do. Continue rinsing. Subsequently consult an

ophthalmologist.

After swallowing: Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an

unconscious person. Do not induce vomiting. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

May cause allergic reactions in already sensitized persons.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Co-ordinate fire-fighting measures to the fire surroundings. Alcohol resistant foam,

extinguishing powder, water spray jet, carbon dioxide, water mist.

Extinguishing media which must not be used for safety reasons:

Full water jet

5.2 Special hazards arising from the substance or mixture

May form dangerous gases and vapours in case of fire.

Furthermore, there may develop: Carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information: Hazchem-Code: -

Do not breathe fumes. Use fine water spray to cool endangered containers.

Do not allow water used to extinguish fire to enter drains, ground or waterways. Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations

of the local authorities.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid exposure. Stop leak if safe to do so.

Provide adequate ventilation. Do not breathe vapour/aerosol.

Avoid contact with the substance. Wear appropriate protective equipment.

Keep unprotected people away.

Take off contaminated clothing and wash it before reuse.

6.2 Environmental precautions

Do not allow to enter into surface water or drains.

If necessary notify appropriate authorities.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding

agents) and place in closed containers for disposal. Never return spills in original containers for re-use.

Additional information: Special danger of slipping by leaking/spilling product.



according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Brake fluid DOT4

 Revision date:
 3/8/2023

 Version:
 2.2

 Replaces version:
 2.1

 Language:
 en-GB

 Date of print:
 3/8/2023

4 of 12

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling:

Provide adequate ventilation, and local exhaust as needed. Do not breathe vapour/aerosol.

Obtain special instructions before use.

Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment.

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse. Have eye wash bottle or eye rinse

ready at work place.

Precautions against fire and explosion:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place. Keep container dry. Keep only in the original container.

Protect from heat and direct sunlight. Store containers in upright position.

Hints on joint storage:

 $\label{thm:condition} \mbox{Keep away from food, drink and animal feeding stuffs. Do not store together with: Strong acids, $$$

strong alkalis, oxidizing agents.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Туре	Limit value
111-46-6	Diethylene glycol	Great Britain: WEL-TWA	101 mg/m³; 23 ppm
111-77-3	2-(2-Methoxyethoxy) ethanol	Great Britain: WEL-TWA	50.1 mg/m³; 10 ppm (may be absorbed through the skin)



according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Brake fluid DOT4

Revision date: 3/8/2023
Version: 2.2
Replaces version: 2.1
Language: en-GB
Date of print: 3/8/2023

5 of 12

DNEL/DMEL: Information about Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl]orthoborate:

DNEL Long-term, systemic, workers, dermal: 8.3 mg/kg bw/d DNEL Long-term, systemic, workers, inhalative: 29.1 mg/m³ DNEL Long-term, systemic, consumers, oral: 4.1 mg/kg bw/d DNEL Long-term, systemic, consumers, dermal: 4.1 mg/kg bw/d DNEL Long-term, systemic, consumers, inhalative: 7.2 mg/m³

Information about Diethylene glycol:

DNEL Long-term, systemic, workers, dermal: 43 mg/kg bw/d DNEL Long-term, systemic, workers, inhalative: 44 mg/m³ DNEL Long-term, local, workers, inhalative: 60 mg/m³

DNEL Long-term, systemic, consumers, dermal: 21 mg/kg bw/d DNEL Long-term, systemic, consumers, inhalative: 12 mg/m³ DNEL Long-term, local, consumers, inhalative: 12 mg/m³

Information about 2-[2-(2-Butoxyethoxy)ethoxy]ethanol:

DNEL Long-term, systemic, workers, dermal: 208 mg/kg bw/d DNEL Long-term, systemic, workers, inhalative: 195 mg/m³ DNEL Long-term, systemic, consumers, oral: 12.5 mg/kg bw/d DNEL Long-term, systemic, consumers, inhalative: 117 mg/m³ DNEL Long-term, systemic, consumers, dermal: 125 mg/kg bw/d

Information about 2-(2-Methoxyethoxy)ethanol:

DNEL Long-term, systemic, workers, dermal: 2.22 mg/kg bw/d DNEL Long-term, systemic, workers, inhalative: 50.1 mg/m³ DNEL Long-term, systemic, consumers, oral: 7.5 mg/kg bw/d DNEL Long-term, systemic, consumers, inhalative: 30.1 mg/m³ DNEL Long-term, systemic, consumers, dermal: 1.33 mg/kg bw/d

Information about Dihydro-3-(tetrapropenyl)furan-2,5-dione: DNEL Long-term, systemic, workers, dermal: 0.33 mg/kg bw/d



according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Brake fluid DOT4

Revision date: 3/8/2023 Version: 2.2 2.1 Replaces version: en-GB Language: 3/8/2023 Date of print:

6 of 12

Page:

PNEC Information about Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl]orthoborate:

> PNEC freshwater: 0.211 mg/L PNEC marine water: 0.021 mg/L

PNEC sediment (freshwater): 0.76 mg/kg dwt PNEC sediment (marine water): 0.076 mg/kg dwt PNEC water (intermittent release): 2.112 mg/L PNEC sewage treatment plant: 100 mg/L

PNEC soil: 0.028 mg/L

Information about Diethylene glycol:

PNEC freshwater: 10 mg/L PNEC marine water: 1 mg/L

PNEC sediment (freshwater): 20.9 mg/kg dwt PNEC sediment (marine water): 2.09 mg/kg dwt PNEC water (intermittent release): 10 mg/L PNEC sewage treatment plant: 199.5 mg/L

PNEC soil: 1.53 mg/L

Information about 2-[2-(2-Butoxyethoxy)ethoxy]ethanol:

PNEC freshwater: 2 mg/L PNEC marine water: 0.2 mg/L

PNEC sediment (freshwater): 7.7 mg/kg dwt PNEC sediment (marine water): 0.77 mg/kg dwt PNEC water (intermittent release): 8.4 mg/L PNEC sewage treatment plant: 200 mg/L

PNEC soil: 0.47 mg/L

PNEC Secondary Poisoning: 111 mg/kg Information about 2-(2-Methoxyethoxy)ethanol:

PNEC freshwater: 12 mg/L PNEC marine water: 1.2 mg/L

PNEC sediment (freshwater): 44.4 mg/kg dwt PNEC sediment (marine water): 0.44 mg/kg dwt PNEC water (intermittent release): 12 mg/L PNEC sewage treatment plant: 10,000 mg/L

PNEC soil: 2.1 mg/L

PNEC Secondary Poisoning: 90 mg/kg

Information about Dihydro-3-(tetrapropenyl)furan-2,5-dione:

PNEC freshwater: 0.02 mg/L PNEC marine water: 0.002 mg/L

PNEC sediment (freshwater): 1.7 mg/kg dwt PNEC sediment (marine water): 0.17 mg/kg dwt PNEC water (intermittent release): 0.2 mg/L PNEC sewage treatment plant: 10 mg/L

PNEC soil: 0.2 mg/L

8.2 Exposure controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment.

Personal protection equipment

Occupational exposure controls

Respiratory protection:

Respiratory protection must be worn whenever the WEL levels have been exceeded. In case of inadequate ventilation wear respiratory protection, wear a respirator conforming to

EN 140 with Type A/P2 filter or better.

The filter class must be suitable for the maximum contaminant concentration

(gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration

is exceeded, closed-circuit breathing apparatus must be used!



according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Brake fluid DOT4

Revision date: 3/8/2023 Version: 2.2 Replaces version: 2.1 Language: en-GB Date of print: 3/8/2023

Page: 7 of 12

Hand protection: Protective gloves according to BS EN 374.

Glove material: Nitrile rubber Breakthrough time: > 480 min Layer thickness: > 0.3 mm

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to BS EN ISO 16321-1:2022.

Body protection: Wear suitable protective clothing.

General protection and hygiene measures:

Do not breathe vapour/aerosol. Do not get in eyes, on skin, or on clothing. Obtain special

instructions before use.

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Have eye wash bottle or eye rinse ready at work place.

Environmental exposure controls

Refer to "6.2 Environmental precautions".

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Physical state at 20 °C and 101.3 kPa: liquid

Colour: Amber

Odour: Characteristic
Odour threshold: No data available

pH: at 20 °C: 7.0 - 11.5

Evaporation rate:

No data available

Flammability:

No data available

Explosion limits:

No data available

Vapour pressure:

No data available

Vapour density:

No data available

Density:

at 20 °C: 1.07 g/mL

Water solubility:

Easily soluble

Partition coefficient: n-octanol/water: -1.98 log P(o/w) (Diethylene glycol)

Based on the n-octanol/water partition coefficient accumulation in organisms is

not expected.

-0.47 log P(o/w) (2-(2-Methoxyethoxy)ethanol)

Based on the n-octanol/water partition coefficient accumulation in organisms is

not expected.

0.51 log P(o/w) (2-[2-(2-Butoxyethoxy)ethoxy]ethanol)

Based on the n-octanol/water partition coefficient accumulation in organisms is

not expected.

>= 4.39 log P(o/w) (Dihydro-3-(tetrapropenyl)furan-2,5-dione)

Based on the n-octanol/water partition coefficient accumulation in organisms is

possible.

-4.37 log P(o/w) (Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl]orthoborate)

Based on the n-octanol/water partition coefficient accumulation in organisms is

not expected.

Auto-ignition temperature: > 300 °C
Decomposition temperature: > 300 °C

Viscosity, kinematic: at 20 °C: 5 - 10 mm²/s



according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Brake fluid DOT4

Revision date: 3/8/2023 Version: 2.2 Replaces version: 2.1 Language: en-GB Date of print: 3/8/2023

8 of 12

Explosive properties: Product is not explosive.

Oxidizing characteristics: Product has no oxidizing effect.

9.2 Other information

Additional information: No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Refer to subsection "Possilbility of hazardous reactions".

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Keep away from heat sources, sparks and open flames. Protect from direct sunlight.

10.5 Incompatible materials

Oxidizing agents, strong acids, strong alkalis.

10.6 Hazardous decomposition products

No decomposition when used properly.

Thermal decomposition: $> 300 \, ^{\circ}\text{C}$



according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Brake fluid DOT4

Revision date: 3/8/2023 Version: 2.2 Replaces version: 2.1 Language: en-GB Date of print: 3/8/2023

Page: 9 of 12

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicological effects:

The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Based on available data, the classification criteria are not met.

ATEmix (calculated): ATE > 2000 mg/kg

Acute toxicity (dermal): Based on available data, the classification criteria are not met.

ATEmix (calculated): ATE > 2000 mg/kg

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met. Sensitisation to the respiratory tract: Based on available data, the classification criteria are not

met.

Skin sensitisation: Based on available data, the classification criteria are not met. Contains

Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met

Carcinogenicity: Based on available data, the classification criteria are not met.

Dihydro-3-(tetrapropenyl)furan-2,5-dione. May produce an allergic reaction.

Reproductive toxicity: Repr. 2; H361d = Suspected of damaging the unborn child. (Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl]orthoborate, 2-(2-Methoxyethoxy)ethanol)

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Other information:

Information about Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl]orthoborate:

LD50 Rat, oral: > 2,000 mg/kg (OECD 401) LD50 Rat, dermal: > 2,000 mg/kg (OECD 402)

Information about Diethylene glycol:

ATE, oral: 500 mg/kg

LD50 Rabbit, dermal: 11,890 mg/kg

Information about 2-[2-(2-Butoxyethoxy)ethoxy]ethanol:

LD50 Rabbit, dermal: 3,540 mg/kg

Information about 2-(2-Methoxyethoxy)ethanol: LD50 Mouse, oral: 7,128 mg/kg (OECD 401) LD50 Rabbit, dermal: 9,404 mg/kg (OECD 402) LC50 Rat, inhalative vapour: > 200 mg/L/1h

Symptoms

In case of ingestion: Nausea, vomiting



according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Brake fluid DOT4

Revision date: 3/8/2023 Version: 2.2 Replaces version: 2.1 Language: en-GB Date of print: 3/8/2023

Page: 10 of 12

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Information about Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl]orthoborate:

Fish toxicity: LD50 Oncorhynchus mykiss: 100.3 mg/L/96h (OECD 203) Algae toxicity: EC50 Raphidocelis subcapitata: > 224.4 mg/L/72h

Bacterial toxicity: > 1,000 mg/L/0,5h (OECD 209)

Information about Diethylene glycol:

Fish toxicity: LC50 Pimephales promelas (fathead minnow): 75,200 mg/L/96h

Algae toxicity: EC50 Pseudokirchneriella subcapitata (green algae): 6,500 - 13,000 mg/L/96h

Daphnia toxicity: EC50 Daphnia magna (Big water flea): 62,630 mg/L/48h

Information about 2-[2-(2-Butoxyethoxy)ethoxy]ethanol: Fish toxicity: LC50 Leuciscus idus: 2,200 - 4,600 mg/L/96h

Algae toxicity: EC50 Pseudokirchneriella subcapitata (green algae): 780 mg/L/72h (OECD 201)

Daphnia toxicity: EC50 Daphnia magna (Big water flea): > 500 mg/L/48h

Information about 2-(2-Methoxyethoxy)ethanol:

Fish toxicity: LC50 Pimephales promelas (fathead minnow): 5,741 mg/L/96h

Algae toxicity: EC50 Pseudokirchneriella subcapitata (green algae): > 1,000 mg/L/96h (OECD

201)

Daphnia toxicity: EC50 Daphnia magna (Big water flea): 1,192 mg/L/48h

Bacterial toxicity: > 1,000 mg/L/0,5h (OECD 209)

Information about Dihydro-3-(tetrapropenyl)furan-2,5-dione:

Fish toxicity: LC50 Oncorhynchus mykiss: > 100 mg/L/96h (OECD 203)

Algae toxicity: EC50 Pseudokirchneriella subcapitata (green algae): 110 mg/L/96h

Bacterial toxicity: 800 mg/L/3h (OECD 209)

12.2 Persistence and degradability

Further details: No data available

12.3 Bioaccumulative potential

Bioconcentration factor (BCF): 100 (Diethylene glycol)

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 16 01 13* = Brake fluids

* = Evidence for disposal must be provided.

Recommendation: Dispose of waste according to applicable legislation.

Do not dispose of with household waste.

Package

Recommendation: Dispose of waste according to applicable legislation. Handle contaminated packages in the

same way as the substance itself.



according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Brake fluid DOT4

 Revision date:
 3/8/2023

 Version:
 2.2

 Replaces version:
 2.1

 Language:
 en-GB

 Date of print:
 3/8/2023

Page: 11 of 12

SECTION 14: Transport information

14.1 UN number

ADR/RID, IMDG, IATA-DGR: not applicable

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR: Not restricted

14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR: not applicable

14.4 Packing group

ADR/RID, IMDG, IATA-DGR: not applicable

14.5 Environmental hazards

Marine pollutant: no

14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

SECTION 15: Regulatory information

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

National regulations - Great Britain

Hazchem-Code:

No data available

National regulations - EC member states

Further regulations, limitations and legal requirements:

Use restriction according to REACH annex XVII, no.: 3, 54, 75.

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

Further information

Wording of the H-phrases under paragraph 2 and 3:

H302 = Harmful if swallowed.

H317 = May cause an allergic skin reaction.

H318 = Causes serious eye damage.

H319 = Causes serious eye irritation.

H360D = May damage the unborn child.

H361d = Suspected of damaging the unborn child.

H413 = May cause long lasting harmful effects to aquatic life.

EUH208 = Contains Dihydro-3-(tetrapropenyl)furan-2,5-dione. May produce an allergic reaction.



according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Brake fluid DOT4

Revision date: 3/8/2023 Version: 2.2 Replaces version: 2.1 Language: en-GB 3/8/2023 Date of print:

Page: 12 of 12

Abbreviations and acronyms: Acute Tox.: Acute toxicity

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

Aquatic Chronic: Hazardous to the aquatic environment - chronic AS/NZS: Australian Standards/New Zealand Standards

ATE: Acute toxicity estimate CAS: Chemical Abstracts Service CFR: Code of Federal Regulations

CLP: Classification, Labelling and Packaging

DMEL: Derived minimal effect level DNEL: Derived no-effect level EC: European Community EC50: Effective Concentration 50%

EN: European Standard EQ: Excepted quantities Eye Dam.: Eye damage Eve Irrit.: Eve irritation

IATA: International Air Transport Association

IATA-DGR: International Air Transport Association – Dangerous Goods Regulations IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

IMDG Code: International Maritime Dangerous Goods Code

LC50: Median lethal concentration

LD50: Lethal dose 50%

log P(o/w): Partition coefficient: octanol/water

MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships

OECD: Organisation for Economic Co-operation and Development

OEL: Occupational Exposure Limit Value

OSHA: Occupational Safety and Health Administration

PBT: Persistent, bioaccumulative and toxic PNEC: Predicted no-effect concentration

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

Repr.: Reproductive toxicity

RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail

Skin Sens.: Skin sensitisation TLV: Threshold Limit Value

TRGS: Technical Rules for Hazardous Substances vPvB: Very persistent and very bioaccumulative

WEL: Workplace Exposure Limit

Reason of change: Changes in section 3: Composition/information on ingredients (CAS 111-77-3)

Date of first version: 1/9/2021

Department issuing data sheet

Contact person: see section 1: Department responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.