

# SAFETY DATA SHEET CARLUBE DOT 4 BRAKE FLUID

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

1.1. Product identifier

Product name CARLUBE DOT 4 BRAKE FLUID

Product number BFL050, BFL300, BFL100, BFL020, BFL455, BFL051

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

Identified uses Car maintenance product.

1.3. Details of the supplier of the safety data sheet

Supplier TETROSYL LIMITED

Bury Lancashire England BL9 7NY 0161 764 5981 0161 797 5899 info@tetrosyl.com

Manufacturer TETROSYL LIMITED

Bury Lancashire England BL9 7NY 0161 764 5981 0161 797 5899 info@tetrosyl.com

1.4. Emergency telephone number

**Emergency telephone** +44 (0)161 764 5981

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Eye Irrit. 2 - H319 STOT RE 2 - H373

Environmental hazards Not Classified

**Human health** See Section 11 for additional information on health hazards.

2.2. Label elements

## **CARLUBE DOT 4 BRAKE FLUID**

## **Pictogram**





Signal word Warning

Hazard statements H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children. P260 Do not breathe vapour/ spray.

P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.
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.

P330 Rinse mouth.

P337+P313 If eye irritation persists: Get medical advice/ attention.

P501 Dispose of contents/ container in accordance with national regulations.

Contains 2.2'-OXYBISETHANOL

# 2.3. Other hazards

# SECTION 3: Composition/information on ingredients

# 3.2. Mixtures

2,2'-OXYBISETHANOL 10-<30%

CAS number: 111-46-6 EC number: 203-872-2 REACH registration number: 01-

2119457857-21

Classification

Acute Tox. 4 - H302 STOT RE 2 - H373

# 2-[2-(2-BUTOXYETHOXY)ETHOXY]ETHANOL 10-<30%

CAS number: 143-22-6 EC number: 205-592-6 REACH registration number: 01-

2119531322-53

Classification

Eye Dam. 1 - H318

BORIC ACID 2.5-<5.0%

CAS number: 10043-35-3 EC number: 233-139-2 REACH registration number: 01-

2119486683-25-0006

Classification

Repr. 1B - H360FD

# **CARLUBE DOT 4 BRAKE FLUID**

1,1'-IMINODIPROPAN -2-OL 2.5-<5.0%

CAS number: 110-97-4 EC number: 203-820-9

Classification
Eye Irrit. 2 - H319

2-(2-METHOXYETHOXY)ETHANOL 2.5-<5.0%

CAS number: 111-77-3 EC number: 203-906-6 REACH registration number: 01-

2119475100-52

Classification Repr. 2 - H361d

2-(2-BUTOXYETHOXY)ETHANOL 0.5-<1%

CAS number: 112-34-5 EC number: 203-961-6 REACH registration number: 01-

2119475104-44

Classification Eye Irrit. 2 - H319

The full text for all hazard statements is displayed in Section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

## SECTION 4: First aid measures

## 4.1. Description of first aid measures

General information Remove affected person from source of contamination. Get medical attention if any discomfort

continues.

**Inhalation** Get medical attention if any discomfort continues.

**Ingestion** Consult a physician for specific advice.

**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. Get medical

attention if any discomfort continues.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 15 minutes. Do not rub eye.

# 4.2. Most important symptoms and effects, both acute and delayed

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure. Effects may be delayed. Keep affected person under observation.

**Inhalation** Vapours in high concentrations are anaesthetic. Symptoms following overexposure may

include the following: Headache. Fatigue. Dizziness. Central nervous system depression.

Irritation of nose, throat and airway.

Ingestion May cause discomfort if swallowed. May cause stomach pain or vomiting. Ingestion of large

amounts may cause unconsciousness. May cause nausea, headache, dizziness and

intoxication. Burning sensation in mouth. May cause unconsciousness, blindness and possibly

death.

Skin contact Prolonged skin contact may cause redness and irritation. Mild dermatitis, allergic skin rash.

Eye contact Irritation of eyes and mucous membranes. Irritation, burning, lachrymation, blurred vision after

liquid splash.

## **CARLUBE DOT 4 BRAKE FLUID**

#### 4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

## SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media 
Use fire-extinguishing media suitable for the surrounding fire.

#### 5.2. Special hazards arising from the substance or mixture

Specific hazards Not relevant. No unusual fire or explosion hazards noted.

Hazardous combustion

Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and

products

other toxic gases or vapours.

## 5.3. Advice for firefighters

Protective actions during

firefighting

No specific firefighting precautions known.

Special protective equipment

for firefighters

Leave danger zone immediately.

## SECTION 6: Accidental release measures

# 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions For personal protection, see Section 8. In case of spills, beware of slippery floors and

surfaces. Follow precautions for safe handling described in this safety data sheet.

# 6.2. Environmental precautions

**Environmental precautions** Collect and dispose of spillage as indicated in Section 13.

# 6.3. Methods and material for containment and cleaning up

Methods for cleaning up For waste disposal, see Section 13. Wear protective clothing as described in Section 8 of this

safety data sheet. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb spillage with non-combustible, absorbent material. Contact Health and

Safety department on 6695 for further assistance.

#### 6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste

disposal, see section 13.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

**Usage precautions** Read and follow manufacturer's recommendations. Avoid spilling. Avoid contact with skin and

eyes. Remove contamination with soap and water or recognised skin cleansing agent. Do not use organic solvents. Do not eat, drink or smoke when using the product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas

of the body with soap and water before leaving the work site.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from food, drink and animal feeding stuffs. Store in tightly-closed, original

container in a dry, cool and well-ventilated place.

# 7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

## **CARLUBE DOT 4 BRAKE FLUID**

## SECTION 8: Exposure Controls/personal protection

## 8.1. Control parameters

#### Occupational exposure limits

No exposure limits known for ingredient(s).

# 2-(2-METHOXYETHOXY)ETHANOL

Long-term exposure limit (8-hour TWA): WEL 10 ppm(Sk) 50.1 mg/m3(Sk)

# 2-(2-BUTOXYETHOXY)ETHANOL

Long-term exposure limit (8-hour TWA): WEL 10 ppm 67.5 mg/m³ Short-term exposure limit (15-minute): WEL 15 ppm 101.2 mg/m³

WEL = Workplace Exposure Limit

## 8.2. Exposure controls

# Protective equipment





Appropriate engineering

controls

Avoid inhalation of vapours. Observe any occupational exposure limits for the product or

ingredients.

**Eye/face protection** The following protection should be worn: Chemical splash goggles or face shield.

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if

a risk assessment indicates skin contact is possible.

Other skin and body

protection

Wear appropriate clothing to prevent reasonably probable skin contact.

Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Provide

eyewash station. Wash contaminated clothing before reuse. Wash at the end of each work

shift and before eating, smoking and using the toilet.

**Respiratory protection** If ventilation is inadequate, suitable respiratory protection must be worn.

# SECTION 9: Physical and Chemical Properties

# 9.1. Information on basic physical and chemical properties

Appearance Clear liquid.

Colour Colourless. to Amber.

Odour No characteristic odour.

Odour threshold Not determined.

**pH** pH (concentrated solution): 7.0 - 10.5

Melting point <-50°C

Initial boiling point and range 260°C @

Flash point >90°C CC (Closed cup).

**Evaporation rate** negligable

Upper/lower flammability or

explosive limits

Not determined.

Vapour pressure <2 mbar @ °C

# **CARLUBE DOT 4 BRAKE FLUID**

Vapour density Not determined.

Relative density 1.01 - 1.07 @ 20°C

Solubility(ies) Miscible with water. Miscible with the following materials: Ethanol.

Partition coefficient : <2.0

Auto-ignition temperature >300°C

**Decomposition Temperature** Not determined.

Viscosity 5 - 10 cSt @ 20°C

9.2. Other information

Other information None.

# SECTION 10: Stability and reactivity

# 10.1. Reactivity

**Reactivity**There are no known reactivity hazards associated with this product.

10.2. Chemical stability

**Stability** No particular stability concerns.

# 10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid contact with strong oxidising agents. Avoid heat, flames and other sources of ignition.

Avoid contact with acids and alkalis.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

# 10.6. Hazardous decomposition products

Hazardous decomposition

products

Does not decompose when used and stored as recommended.

# SECTION 11: Toxicological information

# 11.1. Information on toxicological effects

Acute toxicity - oral

**ATE oral (mg/kg)** 1,672.24

**Inhalation** Unlikely to be hazardous by inhalation because of the low vapour pressure of the product at

ambient temperature.

**Ingestion** Harmful if swallowed.

**Skin contact** Repeated exposure may cause skin dryness or cracking.

**Eye contact** Irritation of eyes and mucous membranes.

Acute and chronic health

hazards

This chemical can be hazardous when inhaled and/or touched.

# SECTION 12: Ecological Information

## **CARLUBE DOT 4 BRAKE FLUID**

**Ecotoxicity** The product components are not classified as environmentally hazardous. However, large or

frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Acute toxicity - fish

LC<sub>50</sub>, 96 hours: >2200mg/l mg/l, Algae

Acute toxicity - aquatic

invertebrates

EC<sub>50</sub>, 48 hours: >500mg/l mg/l, Daphnia magna

Acute toxicity - aquatic plants IC<sub>50</sub>, 72 hours: 2490mg/l mg/l, Fish

12.2. Persistence and degradability

Persistence and degradability The product is biodegradable.

12.3. Bioaccumulative potential

**Bioaccumulative potential** The product contains potentially bioaccumulating substances.

Partition coefficient : <2.0

12.4. Mobility in soil

**Mobility** The product is soluble in water.

Adsorption/desorption

coefficient

Not available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not available.

## SECTION 13: Disposal considerations

# 13.1. Waste treatment methods

General information When handling waste, the safety precautions applying to handling of the product should be

considered.

**Disposal methods**Dispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority. Absorb in vermiculite, dry sand or earth and place into

containers. Dispose of waste via a licensed waste disposal contractor.

# **SECTION 14: Transport information**

General The product is not covered by international regulations on the transport of dangerous goods

(IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

## **CARLUBE DOT 4 BRAKE FLUID**

Not applicable.

#### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

## 14.6. Special precautions for user

Not applicable.

# 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

# SECTION 15: Regulatory information

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

National regulations The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as

amended).

**EU legislation** Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18

December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

# **SECTION 16: Other information**

**General information** Only trained personnel should use this material.

**Revision comments** NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 12/01/2017

Revision 10

Supersedes date 21/10/2015 SDS status Approved.

Hazard statements in full H302 Harmful if swallowed.

H318 Causes serious eye damage. H319 Causes serious eye irritation.

H360FD May damage fertility. May damage the unborn child.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

The information provided in this document has been compiled on the basis of our current knowledge and is believed to be in accordance with the requirements of the Dangerous Substances Directive, Dangerous Preparations Directive and Safety Data Sheets Directive. The information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any particular conditions or process. The conditions and extent of storage and use of material are outside of our control and within the control of the possessor or user. Consequently it is the responsibility of the possessor or user to satisfy themselves as to the completeness of such information and the suitability of the material for their own particular circumstances, conditions or use.