



SAFETY DATA SHEET CARLUBE DOT 4 ESP BRAKE FLUID

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

1.1. Product identifier

Product name CARLUBE DOT 4 ESP BRAKE FLUID

Product number BFE050

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

Identified uses Brake fluid.

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 Eye Irrit. 2 - H319

Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Warning

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Hazard statements	H319 Causes serious eye irritation.
Precautionary statements	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P264 Wash contaminated skin thoroughly after handling. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/ attention.

2.3. Other hazards

This product contains substances classified as PBT.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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			
2,2'-OXYBISETHANOL			5-<10%
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-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			2.5-<5.0%
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.

SECTION 4: First aid measures

4.1. Description of first aid measures

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General information	Effects may be delayed. Keep affected person under observation. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Get medical attention. Remove affected person from source of contamination. Place unconscious person on the side in the recovery position and ensure breathing can take place. Never give anything by mouth to an unconscious person.
Inhalation	Remove affected person from source of contamination. Get medical attention if any discomfort continues. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If throat irritation or coughing persists, proceed as follows. Get medical attention. Show this Safety Data Sheet to the medical personnel.
Ingestion	Get medical attention immediately. Never give anything by mouth to an unconscious person. Try to induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if a large quantity has been ingested. Show this Safety Data Sheet to the medical personnel.
Skin contact	Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if any discomfort continues.
Eye contact	Do not rub eye. Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

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	Irritation of nose, throat and airway.
Ingestion	May cause discomfort if swallowed. May cause unconsciousness, blindness and possibly death. Central nervous system depression.
Skin contact	Prolonged skin contact may cause redness and irritation.
Eye contact	Irritation, burning, lachrymation, blurred vision after liquid splash.

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.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with the following media: Foam, carbon dioxide or dry powder. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	No unusual fire or explosion hazards noted.
Hazardous combustion products	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting	No specific firefighting precautions known.
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Special protective equipment for firefighters Leave danger zone immediately. Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of spray mist and contact with skin and eyes. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Environmental precautions Collect and dispose of spillage as indicated in Section 13. Avoid release to the environment. Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. 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.

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. Keep away from heat, sparks and open flame. Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist. 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. Do not eat, drink or smoke when using the product. Avoid inhalation of vapours/spray and contact with skin and eyes. Avoid the formation of mists. Observe any occupational exposure limits for the product or ingredients. Avoid inhalation of vapours and spray/mists. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from heat, sparks and open flame. Keep container tightly closed. Keep containers upright. Keep only in the original container. Avoid contact with oxidising agents.

7.3. Specific end use(s)

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

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

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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. Provide adequate ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

It is recommended that gloves are made of the following material: Nitrile rubber. 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 suitable protective clothing as protection against splashing or contamination.

Hygiene measures

Provide eyewash station. Wash contaminated clothing before reuse. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Respiratory protection

No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colourless. to Amber.
Odour	Mild.
Melting point	<-50°C
Initial boiling point and range	>260°C @ 1.013 hPa
Flash point	>100°C
Evaporation rate	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.
Solubility(ies)	Miscible with water. Miscible with the following materials: Ethanol.
Partition coefficient	Not determined.
Auto-ignition temperature	>300°C
Decomposition Temperature	Not determined.

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Viscosity 5-10 cSt @ 20°C

9.2. Other information

Other information None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react with the product: Oxidising materials.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not determined.

10.4. Conditions to avoid

Conditions to avoid Avoid contact with the following materials: Oxidising materials.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects No information available.

Acute toxicity - oral

ATE oral (mg/kg) 5,005.01

Specific target organ toxicity - single exposure

Target organs Central nervous system Heart and cardiovascular system Kidneys

Inhalation Unlikely to be hazardous by inhalation because of the low vapour pressure of the product at ambient temperature. Vapours may irritate throat/respiratory system. Symptoms following overexposure may include the following: Coughing.

Ingestion May cause liver and/or renal damage. Irritating. Symptoms following overexposure may include the following: Nausea, vomiting. Stomach pain. Harmful: possible risk of irreversible effects if swallowed.

Skin contact Slightly irritating.

Eye contact Irritating to eyes.

Acute and chronic health hazards May cause liver and/or renal damage. Possible risk of adverse reproductive effects. A single exposure may cause the following adverse effects: Central nervous system depression. May cause damage to the kidneys. May cause damage to the kidneys. Contains a substance/a group of substances which may damage fertility and the unborn child.

Route of exposure Ingestion.

Target organs Central nervous system Heart & cardiovascular system Kidneys

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Medical symptoms	Allergic rash. Delayed, often serious, breathing problems. Tachycardia (excessively rapid heart beat, including rapid and weak pulse). Unconsciousness, possibly death.
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SECTION 12: Ecological Information

Ecotoxicity	The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.
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12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: >100mg/l mg/l, Fish
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Acute toxicity - aquatic invertebrates	Not available.
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12.2. Persistence and degradability

Persistence and degradability	The product is readily biodegradable.
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12.3. Bioaccumulative potential

Bioaccumulative potential	The product is not bioaccumulating.
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Partition coefficient	Not determined.
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12.4. Mobility in soil

Adsorption/desorption coefficient	Not available.
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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.
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12.6. Other adverse effects

Other adverse effects	Not applicable.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
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Disposal methods	Confirm disposal procedures with environmental engineer and local regulations.
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SECTION 14: Transport information

General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
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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

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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 EH40/2005 Workplace exposure limits.

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

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

Issued by Health & Safety Department

Revision date 11/07/2018

Revision 5

Supersedes date 08/04/2016

SDS status Approved.

Hazard statements in full H302 Harmful if swallowed.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.