



## SAFETY DATA SHEET CARLUBE DOT 3 BRAKE FLUID

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

#### 1.1. Product identifier

Product name CARLUBE DOT 3 BRAKE FLUID

Product number BRF050

#### 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 EUROPE  
79 rue du chemin vert  
59.273 Fretin  
TEL: 03 20 28 06 30  
qualite@tetrosyl-france.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 0161 764 5981

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (SI 2019 No. 720)

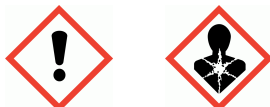
Physical hazards Not Classified

Health hazards Eye Irrit. 2 - H319 Repr. 2 - H361d STOT RE 2 - H373

Environmental hazards Not Classified

#### 2.2. Label elements

##### Hazard pictograms



Signal word Warning

Hazard statements  
H319 Causes serious eye irritation.  
H361d Suspected of damaging the unborn child.  
H373 May cause damage to organs through prolonged or repeated exposure.

## CARLUBE DOT 3 BRAKE FLUID

<b>Precautionary statements</b>	P101 If medical advice is needed, have product container or label at hand.
	P102 Keep out of reach of children.
	P201 Obtain special instructions before use.
	P202 Do not handle until all safety precautions have been read and understood.
	P260 Do not breathe vapour/ spray.
	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.
	P308+P313 IF exposed or concerned: Get medical advice/ attention.
	P314 Get medical advice/ attention if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/ attention.	
P405 Store locked up.	
P501 Dispose of contents/ container in accordance with national regulations.	

<b>Contains</b>	2,2' -OXYBISETHANOL, TRIS[2-[2-(2-METHOXYETHOXY)ETHOXY]ETHYL] ORTHOBORATE
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### 2.3. Other hazards

#### SECTION 3: Composition/information on ingredients

##### 3.2. Mixtures

<b>2-[2-(2-BUTOXYETHOXY)ETHOXY]ETHANOL</b>	<b>10-&lt;30%</b>
CAS number: 143-22-6	EC number: 205-592-6
<b>Classification</b>	
Eye Dam. 1 - H318	
<b>2,2' -OXYBISETHANOL</b>	<b>10-&lt;30%</b>
CAS number: 111-46-6	EC number: 203-872-2
<b>Classification</b>	
Acute Tox. 4 - H302	
STOT RE 2 - H373	
<b>TRIS[2-[2-(2-METHOXYETHOXY)ETHOXY]ETHYL] ORTHOBORATE</b>	<b>10-&lt;30%</b>
CAS number: 30989-05-0	EC number: 250-418-4
<b>Classification</b>	
Repr. 2 - H361d	
<b>BUTYL POLYGLYCOL</b>	<b>10-&lt;30%</b>
CAS number: 9004-77-7	EC number: 500-012-0
<b>Classification</b>	
Eye Irrit. 2 - H319	

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<b>2-(2-METHOXYETHOXY)ETHANOL</b>	<b>2-&lt;3%</b>
CAS number: 111-77-3	EC number: 203-906-6
<b>Classification</b>	
Repr. 2 - H361d	
<b>2-(2-BUTOXYETHOXY)ETHANOL</b>	<b>2-&lt;3%</b>
CAS number: 112-34-5	EC number: 203-961-6
<b>Classification</b>	
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

<b>General information</b>	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.
<b>Inhalation</b>	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.
<b>Ingestion</b>	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.
<b>Skin contact</b>	Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if any discomfort continues.
<b>Eye contact</b>	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

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

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### 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** 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.

**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

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### 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

##### 2,2' -OXYBIETHANOL

Long-term exposure limit (8-hour TWA): WEL 23 ppm 101 mg/m<sup>3</sup>

##### 2-(2-METHOXYETHOXY)ETHANOL

Long-term exposure limit (8-hour TWA): WEL 10 ppm(Sk) 50.1 mg/m<sup>3</sup>(Sk)

##### 2-(2-BUTOXYETHOXY)ETHANOL

Long-term exposure limit (8-hour TWA): WEL 10 ppm 67.5 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 15 ppm 101.2 mg/m<sup>3</sup>

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

## CARLUBE DOT 3 BRAKE FLUID

<b>Appearance</b>	Liquid.
<b>Colour</b>	Light (or pale). Yellow.
<b>Odour</b>	Mild.
<b>pH</b>	pH (concentrated solution): 7.0 - 10.5
<b>Melting point</b>	<-50°C
<b>Initial boiling point and range</b>	>210°C @ 1013 hPa
<b>Flash point</b>	126°C
<b>Evaporation rate</b>	Not determined.
<b>Upper/lower flammability or explosive limits</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Relative density</b>	1.01 - 1.06g/cm <sup>3</sup> @ 20°C
<b>Solubility(ies)</b>	Miscible with water. Miscible with the following materials: Ethanol.
<b>Auto-ignition temperature</b>	>280°C
<b>Viscosity</b>	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** The substance is hygroscopic and will absorb water by contact with the moisture in the air.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Not determined.

### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition.

### 10.5. Incompatible materials

**Materials to avoid** Strong oxidising agents. Strong acids. Strong alkalis. Water, steam, water mixtures.

### 10.6. Hazardous decomposition products

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

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Toxicological effects** No information available.

### Acute toxicity - oral

**Summary** Based on available data the classification criteria are not met.

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<b>ATE oral (mg/kg)</b>	2,083.33
<b><u>Acute toxicity - dermal</u></b>	
<b>Summary</b>	Based on available data the classification criteria are not met.
<b><u>Acute toxicity - inhalation</u></b>	
<b>Summary</b>	Based on available data the classification criteria are not met.
<b><u>Skin corrosion/irritation</u></b>	
<b>Summary</b>	Based on available data the classification criteria are not met.
<b><u>Serious eye damage/irritation</u></b>	
<b>Summary</b>	Based on available data the classification criteria are not met.
<b><u>Respiratory sensitisation</u></b>	
<b>Summary</b>	Based on available data the classification criteria are not met.
<b><u>Skin sensitisation</u></b>	
<b>Summary</b>	Based on available data the classification criteria are not met.
<b><u>Germ cell mutagenicity</u></b>	
<b>Summary</b>	Based on available data the classification criteria are not met.
<b><u>Carcinogenicity</u></b>	
<b>Summary</b>	Based on available data the classification criteria are not met.
<b><u>Reproductive toxicity</u></b>	
<b>Summary</b>	Based on available data the classification criteria are not met.
<b>Reproductive toxicity - development</b>	Suspected of damaging the unborn child.
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>Summary</b>	Based on available data the classification criteria are not met.
<b>Target organs</b>	Central nervous system Heart and cardiovascular system Kidneys
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>Summary</b>	Based on available data the classification criteria are not met.
<b><u>Aspiration hazard</u></b>	
<b>Summary</b>	Based on available data the classification criteria are not met.
<b><u>Inhalation</u></b>	
<b>Summary</b>	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.
<b><u>Ingestion</u></b>	
<b>Summary</b>	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.
<b><u>Skin contact</u></b>	
<b>Summary</b>	Slightly irritating.
<b><u>Eye contact</u></b>	
<b>Summary</b>	Irritating to eyes.
<b><u>Acute and chronic health hazards</u></b>	
<b>Summary</b>	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.

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<b>Route of exposure</b>	Ingestion.
<b>Target organs</b>	Central nervous system Heart & cardiovascular system Kidneys
<b>Medical symptoms</b>	Allergic rash. Delayed, often serious, breathing problems. Tachycardia (excessively rapid heart beat, including rapid and weak pulse). Unconsciousness, possibly death.

### 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.

#### 12.1. Toxicity

##### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: >100mg/l mg/l, Fish

**Acute toxicity - aquatic invertebrates** Not available.

#### 12.2. Persistence and degradability

**Persistence and degradability** The product is biodegradable.

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** The product is not bioaccumulating.

#### 12.4. Mobility in soil

**Mobility** The product is miscible with water. May spread in water systems.

**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 UK criteria.

#### 12.6. Other adverse effects

**Other adverse effects** Not applicable.

### 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.

**Disposal methods** Confirm disposal procedures with environmental engineer and local regulations.

### 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)



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No transport warning sign required.

### 14.4. Packing group

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 Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

<b>General information</b>	Only trained personnel should use this material.
<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Issued by</b>	Regulatory Department
<b>Revision date</b>	07/04/2022
<b>Revision</b>	18
<b>Supersedes date</b>	24/01/2022
<b>SDS status</b>	Approved.
<b>Hazard statements in full</b>	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.

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.