



## SAFETY DATA SHEET

### STP® Synthetic Brake Fluid DOT 4

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended).

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

##### 1.1. Product identifier

**Product name** STP® Synthetic Brake Fluid DOT 4  
**Product number** 69500

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

**Identified uses** Brake fluid.  
**Uses advised against** No specific uses advised against are identified.

##### 1.3. Details of the supplier of the safety data sheet

**Supplier** Energizer Trading Ltd  
 Sword House  
 Totteridge Road  
 High Wycombe  
 HP13 6DG  
 UK  
 Tel: +44 845 602 1995  
 euregulatory@energizer.com

##### 1.4. Emergency telephone number

**Emergency telephone** +44 1495 350234  
 Monday - Thursday: 0830 - 1700  
 Friday: 0830 - 1530

**National emergency telephone number** Product information has been submitted to the UK National Poisons Information Service (NPIS) and is accessible to medical health professionals.

#### SECTION 2: Hazards identification

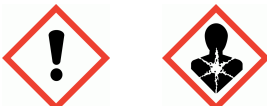
##### 2.1. Classification of the substance or mixture

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

**Physical hazards** Not Classified  
**Health hazards** Eye Irrit. 2 - H319 Repr. 2 - H361d  
**Environmental hazards** Not Classified  
**Human health** Irritating to eyes. Suspected of damaging the unborn child.

##### 2.2. Label elements

###### Hazard pictograms



## STP® Synthetic Brake Fluid DOT 4

|   |  |
|---|--|
| <b>Signal word</b>                            | Warning  |
| <b>Hazard statements</b>                      | H319 Causes serious eye irritation.<br>H361d Suspected of damaging the unborn child.   |
| <b>Precautionary statements</b>               | P102 Keep out of reach of children.<br>P280 Wear protective gloves and eye protection.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P337+P313 If eye irritation persists: Get medical advice/ attention.<br>P308+P313 IF exposed or concerned: Get medical advice/ attention.<br>P501 Dispose of contents/ container in accordance with national regulations. |
| <b>Contains</b>                               | Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate   |
| <b>Supplementary precautionary statements</b> | P201 Obtain special instructions before use.<br>P202 Do not handle until all safety precautions have been read and understood.<br>P264 Wash contaminated skin thoroughly after handling.<br>P405 Store locked up.  |

### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

|   |
|---|
| <b>2-(2-(2-butoxyethoxy)ethoxy)ethanol</b> <span style="float: right;"><b>20 - &lt;30%</b></span><br>CAS number: 143-22-6                      EC number: 205-592-6<br>This substance has specific concentration limits.          |
| <b>Classification</b><br>Eye Dam. 1 - H318  |
| <b>Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate</b> <span style="float: right;"><b>20 - &lt;30%</b></span><br>CAS number: 30989-05-0                      EC number: 250-418-4  |
| <b>Classification</b><br>Repr. 2 - H361d  |
| <b>2,2'-oxydiethanol</b> <span style="float: right;"><b>5 - &lt;10%</b></span><br>CAS number: 111-46-6                      EC number: 203-872-2  |
| <b>Classification</b><br>Acute Tox. 4 - H302  |
| <b>Poly(oxy-1,2-ethanediyl), α-butyl-ω-hydroxy-</b> <span style="float: right;"><b>5 - &lt;10%</b></span><br>CAS number: 9004-77-7                      EC number: 500-012-0<br>This substance has specific concentration limits. |
| <b>Classification</b><br>Eye Dam. 1 - H318  |

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|                                   |                      |
|-----------------------------------|----------------------|
| <b>2-(2-butoxyethoxy)ethanol</b>  | <b>1 - &lt;3%</b>    |
| CAS number: 112-34-5              | EC number: 203-961-6 |
| <b>Classification</b>             |                      |
| Eye Irrit. 2 - H319               |                      |
| <b>2-(2-methoxyethoxy)ethanol</b> | <b>1 - &lt;3%</b>    |
| CAS number: 111-77-3              | EC number: 203-906-6 |
| <b>Classification</b>             |                      |
| Repr. 2 - H361d                   |                      |

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

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

|                            |  |
|----------------------------|--|
| <b>General information</b> | Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.   |
| <b>Inhalation</b>          | If throat irritation or coughing persists, proceed as follows. Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms are severe or persist.   |
| <b>Ingestion</b>           | Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if symptoms are severe or persist. |
| <b>Skin contact</b>        | Remove contaminated clothing and rinse skin thoroughly with water. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe or persist after washing.   |
| <b>Eye contact</b>         | Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms are severe or persist after washing.   |

#### 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.                      |
| <b>Inhalation</b>          | Prolonged or repeated exposure to vapours in high concentrations may cause the following adverse effects: Drowsiness. Dizziness. |
| <b>Ingestion</b>           | Gastrointestinal symptoms, including upset stomach.  |
| <b>Skin contact</b>        | Prolonged skin contact may cause redness and irritation. Prolonged contact may cause dryness of the skin.                        |
| <b>Eye contact</b>         | Irritating to eyes. May cause discomfort. Pain. Profuse watering of the eyes. Redness.   |

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

|                             |  |
|-----------------------------|--|
| <b>Notes for the doctor</b> | Treat symptomatically. Keep affected person under observation. |
|-----------------------------|--|

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

|                                     |  |
|-------------------------------------|--|
| <b>Suitable extinguishing media</b> | Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. |
|-------------------------------------|--|

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**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** Containers can burst violently or explode when heated, due to excessive pressure build-up.

**Hazardous combustion products** Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Toxic gases or vapours.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Use water to keep fire exposed containers cool and disperse vapours.

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing will provide a basic level of protection for chemical incidents.

## 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. Eliminate all ignition sources if safe to do so. Avoid contact with skin and eyes.

### 6.2. Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Wear protective clothing as described in Section 8 of this safety data sheet. No smoking, sparks, flames or other sources of ignition near spillage. Eliminate all ignition sources if safe to do so. Do not touch or walk into spilled material. Absorb in vermiculite, dry sand or earth and place into containers. Use only non-sparking tools. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

### 6.4. Reference to other sections

**Reference to other sections** See Section 11 for additional information on health hazards. 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 contact with skin and eyes. Avoid inhalation of vapours and spray/mists. Wear protective clothing as described in Section 8 of this safety data sheet. Suspected of damaging the unborn child. Avoid contact during pregnancy/while nursing. Take precautionary measures against static discharges. Keep away from heat, sparks and open flame. Provide adequate ventilation.

**Advice on general occupational hygiene** Avoid contact with eyes and prolonged skin contact. 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 this product.

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

**Storage precautions** Store in a cool and well-ventilated place. Store in tightly-closed, original container. Store at temperatures between 15°C and 30°C. Keep away from heat, sparks and open flame. Take precautionary measures against static discharges.

### 7.3. Specific end use(s)

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

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### SECTION 8: Exposure controls/Personal protection

#### 8.1. Control parameters

##### Occupational exposure limits

##### **2,2'-oxydiethanol**

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

##### **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>

##### **2-(2-methoxyethoxy)ethanol**

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

Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through the skin.

#### 2-(2-(2-butoxyethoxy)ethoxy)ethanol (CAS: 143-22-6)

##### **DNEL**

Workers - Inhalation; Long term systemic effects: 24 mg/m<sup>3</sup>

Workers - Inhalation; Short term systemic effects, local effects: 96 mg/m<sup>3</sup>

Workers - Inhalation; Long term local effects: 30.5 mg/m<sup>3</sup>

Workers - Dermal; Long term systemic effects: 1005 mg/kg/day

Workers - Dermal; Short term systemic effects: 400 mg/kg/day

General population - Inhalation; Long term systemic effects: 12 mg/m<sup>3</sup>

General population - Inhalation; Short term local effects, systemic effects: 48 mg/m<sup>3</sup>

General population - Inhalation; Long term local effects: 15.252 mg/m<sup>3</sup>

General population - Dermal; Long term systemic effects: 502.5 mg/kg/day

General population - Dermal; Short term systemic effects: 200 mg/kg

General population - Oral; Long term systemic effects: 50.25 mg/kg/day

General population - Oral; Short term systemic effects: 103.4 mg/kg/day

##### **PNEC**

Fresh water; 100 mg/l

marine water; 142.57 mg/l

STP; 199.5 mg/l

Sediment (Freshwater); 11.115 mg/kg

Sediment (Marinewater); 1.111 mg/kg

Soil; 11.51 mg/kg

Oral; 525.5 mg/kg

#### Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate (CAS: 30989-05-0)

##### **DNEL**

Workers - Inhalation; Long term systemic effects: 29.1 mg/m<sup>3</sup>

Workers - Dermal; Long term systemic effects: 8.3 mg/kg/day

General population - Inhalation; Long term systemic effects: 7.2 mg/m<sup>3</sup>

General population - Dermal; Long term systemic effects: 4.1 mg/kg/day

General population - Oral; Long term systemic effects: 4.1 mg/kg/day

##### **PNEC**

Fresh water; 0.211 mg/l

marine water; 0.021 mg/l

STP; 100 mg/l

Sediment (Freshwater); 0.76 mg/kg

Sediment (Marinewater); 0.076 mg/kg

Soil; 0.028 mg/kg

#### 2,2'-oxydiethanol (CAS: 111-46-6)

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|             |  |
|-------------|--|
| <b>DNEL</b> | Workers - Inhalation; Long term systemic effects: 44 mg/m <sup>3</sup><br>Workers - Inhalation; Long term local effects: 60 mg/m <sup>3</sup><br>Workers - Dermal; Long term systemic effects: 43 mg/kg/day<br>General population - Inhalation; Long term systemic effects, local effects: 12 mg/m <sup>3</sup><br>General population - Dermal; Long term systemic effects: 21 mg/kg/day |
| <b>PNEC</b> | Fresh water; 10 mg/l<br>marine water; 1 mg/l<br>STP; 199.5 mg/l<br>Sediment (Freshwater); 20.9 mg/kg<br>Sediment (Marinewater); 2.09 mg/kg<br>Soil; 1.53 mg/kg   |

### Poly(oxy-1,2-ethanediyl), α-butyl-ω-hydroxy- (CAS: 9004-77-7)

|             |   |
|-------------|---|
| <b>DNEL</b> | Workers - Inhalation; Long term systemic effects: 245 mg/m <sup>3</sup><br>Workers - Dermal; Long term systemic effects: 265 mg/kg/day<br>General population - Inhalation; Long term systemic effects: 149 mg/m <sup>3</sup><br>General population - Dermal; Long term systemic effects: 160 mg/kg/day<br>General population - Oral; Long term systemic effects: 16 mg/kg/day |
| <b>PNEC</b> | Fresh water; 4.5 mg/l<br>marine water; 0.31 mg/l<br>STP; 500 mg/l<br>Sediment (Freshwater); 6.6 mg/kg<br>Sediment (Marinewater); 0.66 mg/kg<br>Soil; 1.32 mg/kg   |

### 2-(2-butoxyethoxy)ethanol (CAS: 112-34-5)

|             |  |
|-------------|--|
| <b>DNEL</b> | Workers - Inhalation; Long term systemic effects, local effects: 67.5 mg/m <sup>3</sup><br>Workers - Dermal; Long term systemic effects: 83 mg/kg/day<br>General population - Inhalation; Long term systemic effects, local effects: 40.5 mg/m <sup>3</sup><br>General population - Dermal; Long term systemic effects: 50 mg/kg/day<br>General population - Oral; Long term systemic effects: 5 mg/kg/day |
| <b>PNEC</b> | Fresh water; 1.1 mg/l<br>marine water; 0.11 mg/l<br>STP; 200 mg/l<br>Sediment (Freshwater); 4.4 mg/kg<br>Sediment (Marinewater); 0.44 mg/kg<br>Soil; 0.32 mg/kg<br>Oral; 56 mg/kg  |

### 2-(2-methoxyethoxy)ethanol (CAS: 111-77-3)

|             |  |
|-------------|--|
| <b>DNEL</b> | Workers - Inhalation; Long term systemic effects: 50.1 mg/m <sup>3</sup><br>Workers - Dermal; Long term systemic effects: 2.22 mg/kg/day<br>General population - Inhalation; Long term systemic effects: 30.1 mg/m <sup>3</sup><br>General population - Dermal; Long term systemic effects: 1.33 mg/kg/day<br>General population - Oral; Long term systemic effects: 7.5 mg/kg/day |
|-------------|--|

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### PNEC

Fresh water; 12 mg/l  
 marine water; 1.2 mg/l  
 STP; 10000 mg/l  
 Sediment (Freshwater); 44.4 mg/kg  
 Sediment (Marinewater); 0.44 mg/kg  
 Soil; 2.1 mg/kg

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate ventilation. All handling should only take place in well-ventilated areas. Avoid inhalation of vapours and spray/mists. Use explosion-proof electrical, ventilating and lighting equipment.

#### 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: Wear tight-fitting, 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. For exposure up to 8 hours, wear gloves made of the following material: Nitrile rubber. Thickness:  $\geq 0.2$  mm Butyl rubber. Thickness:  $\geq 0.3$  mm The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Frequent changes are recommended.

#### Other skin and body protection

Wear appropriate clothing to prevent repeated or prolonged skin contact.

#### Hygiene measures

Do not smoke in work area. Wash promptly with soap and water if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet.

#### Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'UKCA'-marked.

#### Environmental exposure controls

Keep container tightly sealed when not in use.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

|                                 |                                      |
|---------------------------------|--------------------------------------|
| Appearance                      | Liquid.                              |
| Colour                          | Amber.                               |
| Odour                           | Mild.                                |
| Odour threshold                 | Not determined.                      |
| pH                              | pH (concentrated solution): 7 - 10.5 |
| Melting point                   | < -50°C                              |
| Initial boiling point and range | > 260°C                              |
| Flash point                     | > 100°C                              |

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|  |   |
|--|---|
| Evaporation rate                             | Not determined.   |
| Evaporation factor                           | Not determined.   |
| Flammability (solid, gas)                    | Not relevant.   |
| Upper/lower flammability or explosive limits | Not relevant.   |
| Vapour pressure                              | 1.0 mbar  |
| Vapour density                               | Not determined.   |
| Relative density                             | 1.02 - 1.07   |
| Bulk density                                 | Not determined.   |
| Solubility(ies)                              | Soluble in water.   |
| Partition coefficient                        | Not determined.   |
| Auto-ignition temperature                    | Not relevant.   |
| Decomposition Temperature                    | 300°C   |
| Viscosity                                    | 5 - 10 cSt @ 20°C   |
| Explosive properties                         | Not considered to be explosive.   |
| Oxidising properties                         | The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising. |

### 9.2. Other information

Other information No information required.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

### 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 Will not polymerise.

### 10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

### 10.5. Incompatible materials

Materials to avoid Strong acids. Strong alkalis. Strong oxidising agents. Strong reducing agents.

### 10.6. Hazardous decomposition products

Hazardous decomposition products None at ambient temperatures. Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Oxides of nitrogen.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

Notes (oral LD<sub>50</sub>) Based on available data the classification criteria are not met.



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|  |   |
|--|---|
| <b>ATE oral (mg/kg)</b>  | 5,050.51  |
| <b><u>Acute toxicity - dermal</u></b>                            |   |
| <b>Notes (dermal LD<sub>50</sub>)</b>                            | Based on available data the classification criteria are not met.  |
| <b><u>Acute toxicity - inhalation</u></b>                        |   |
| <b>Notes (inhalation LC<sub>50</sub>)</b>                        | Based on available data the classification criteria are not met.  |
| <b><u>Skin corrosion/irritation</u></b>                          |   |
| <b>Skin corrosion/irritation</b>                                 | Based on available data the classification criteria are not met.  |
| <b><u>Serious eye damage/irritation</u></b>                      |   |
| <b>Serious eye damage/irritation</b>                             | Causes serious eye irritation.  |
| <b><u>Respiratory sensitisation</u></b>                          |   |
| <b>Respiratory sensitisation</b>                                 | Based on available data the classification criteria are not met.  |
| <b><u>Skin sensitisation</u></b>                                 |   |
| <b>Skin sensitisation</b>  | Based on available data the classification criteria are not met.  |
| <b><u>Germ cell mutagenicity</u></b>                             |   |
| <b>Genotoxicity - in vitro</b>                                   | Based on available data the classification criteria are not met.  |
| <b>Genotoxicity - in vivo</b>                                    | Based on available data the classification criteria are not met.  |
| <b><u>Carcinogenicity</u></b>                                    |   |
| <b>Carcinogenicity</b>   | Based on available data the classification criteria are not met.  |
| <b><u>Reproductive toxicity</u></b>                              |   |
| <b>Reproductive toxicity - fertility</b>                         | Suspected of damaging the unborn child.   |
| <b><u>Specific target organ toxicity - single exposure</u></b>   |   |
| <b>STOT - single exposure</b>                                    | Based on available data the classification criteria are not met.  |
| <b><u>Specific target organ toxicity - repeated exposure</u></b> |   |
| <b>STOT - repeated exposure</b>                                  | Based on available data the classification criteria are not met.  |
| <b><u>Aspiration hazard</u></b>                                  |   |
| <b>Aspiration hazard</b>   | Not anticipated to present an aspiration hazard, based on chemical structure.   |
| <b>General information</b>                                       | Known or suspected teratogen. Avoid contact during pregnancy/while nursing. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. |

### Toxicological information on ingredients.

#### 2-(2-(2-butoxyethoxy)ethoxy)ethanol

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 5,170.0

**Species** Rat

**ATE oral (mg/kg)** 5,170.0

##### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 3,540.0

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|   |   |
|---|---|
| <b>Species</b>                          | Rabbit  |
| <b>ATE dermal (mg/kg)</b>               | 3,540.0                                       |
| <b><u>Skin corrosion/irritation</u></b> |   |
| <b>Animal data</b>                      | Dose: 0.5 ml, 4 hours, Rabbit Not irritating. |

### **Serious eye damage/irritation**

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Serious eye damage/irritation</b> | Causes serious eye damage. |
|--------------------------------------|----------------------------|

### **Germ cell mutagenicity**

|                                |  |
|--------------------------------|--|
| <b>Genotoxicity - in vitro</b> | Bacterial reverse mutation test: Negative. |
|--------------------------------|--|

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

### **Acute toxicity - oral**

|                                     |   |
|-------------------------------------|---|
| <b>Notes (oral LD<sub>50</sub>)</b> | LD <sub>50</sub> >2000 mg/kg, Oral, Rat |
|-------------------------------------|---|

### **Acute toxicity - dermal**

|                                       |   |
|---------------------------------------|---|
| <b>Notes (dermal LD<sub>50</sub>)</b> | LD <sub>50</sub> >2000 mg/kg, Dermal, Rat |
|---------------------------------------|---|

### **Reproductive toxicity**

|  |   |
|--|---|
| <b>Reproductive toxicity - development</b> | Suspected of damaging the unborn child.<br>Fetotoxicity: - NOAEL: 250 mg/kg/day, Oral, Rabbit |
|--|---|

### **2,2'-oxydiethanol**

### **Acute toxicity - oral**

|                                     |                       |
|-------------------------------------|-----------------------|
| <b>Notes (oral LD<sub>50</sub>)</b> | Harmful if swallowed. |
|-------------------------------------|-----------------------|

|                         |       |
|-------------------------|-------|
| <b>ATE oral (mg/kg)</b> | 500.0 |
|-------------------------|-------|

### **Skin corrosion/irritation**

|                    |                 |
|--------------------|-----------------|
| <b>Animal data</b> | Not irritating. |
|--------------------|-----------------|

### **Serious eye damage/irritation**

|                                      |                 |
|--------------------------------------|-----------------|
| <b>Serious eye damage/irritation</b> | Not irritating. |
|--------------------------------------|-----------------|

### **Skin sensitisation**

|                           |  |
|---------------------------|--|
| <b>Skin sensitisation</b> | Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. |
|---------------------------|--|

### **Poly(oxy-1,2-ethanediyl), α-butyl-ω-hydroxy-**

### **Acute toxicity - oral**

|                                     |   |
|-------------------------------------|---|
| <b>Notes (oral LD<sub>50</sub>)</b> | LD <sub>50</sub> >2000 mg/kg, Oral, Rat |
|-------------------------------------|---|

### **Acute toxicity - dermal**

|                                       |   |
|---------------------------------------|---|
| <b>Notes (dermal LD<sub>50</sub>)</b> | LD <sub>50</sub> 3540 mg/kg, Dermal, Rabbit |
|---------------------------------------|---|

### **Serious eye damage/irritation**

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Serious eye damage/irritation</b> | Causes serious eye damage. |
|--------------------------------------|----------------------------|

### **2-(2-butoxyethoxy)ethanol**

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### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 2,410.0

Species Mouse

ATE oral (mg/kg) 2,410.0

### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 27,640.0

Species Rabbit

ATE dermal (mg/kg) 27,640.0

### Skin corrosion/irritation

Animal data Dose: 0.5 ml, 1 hour, Rabbit Not irritating.

### Serious eye damage/irritation

Serious eye damage/irritation Eye Irrit. 2 - H319 Causes serious eye irritation.

### Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

### Germ cell mutagenicity

Genotoxicity - in vitro Chromosome aberration: Negative.

### Reproductive toxicity

Reproductive toxicity - development Maternal toxicity: - NOAEL: 633 mg/kg/day, Oral, Rat

### 2-(2-methoxyethoxy)ethanol

### Acute toxicity - oral

Notes (oral LD<sub>50</sub>) LD<sub>50</sub> 7128 mg/kg, Oral, Mouse

### Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) LD<sub>50</sub> 9404 mg/kg, Dermal, Rabbit

### Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) LC<sub>50</sub> >1.2 mg/l, Inhalation, Rat

### Reproductive toxicity

Reproductive toxicity - development Suspected of damaging the unborn child.

## SECTION 12: Ecological information

### 12.1. Toxicity

**Toxicity** Not considered toxic to fish. However, large or frequent spills may have hazardous effects on the environment.

### Ecological information on ingredients.

### 2-(2-(2-butoxyethoxy)ethoxy)ethanol

## STP® Synthetic Brake Fluid DOT 4

### Acute aquatic toxicity

|   |   |
|---|---|
| <b>Acute toxicity - fish</b>                  | LC <sub>50</sub> , 96 hours: 2200 - 4600 mg/l, Leuciscus idus (Golden orfe) |
| <b>Acute toxicity - aquatic invertebrates</b> | LC <sub>50</sub> , 48 hours: 2210 mg/l, Daphnia magna                       |
| <b>Acute toxicity - aquatic plants</b>        | NOEC, 72 hours: 62.5 mg/l, Desmodemus subspicatus                           |

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

### Acute aquatic toxicity

|   |  |
|---|--|
| <b>Acute toxicity - fish</b>                  | LC <sub>50</sub> , 96 hours: > 222.2 mg/l, Oncorhynchus mykiss (Rainbow trout) |
| <b>Acute toxicity - aquatic invertebrates</b> | EC <sub>50</sub> , 48 hours: >500 mg/l, Daphnia magna                          |

## 12.2. Persistence and degradability

**Persistence and degradability** Expected to be readily biodegradable.

### Ecological information on ingredients.

#### 2-(2-(2-butoxyethoxy)ethoxy)ethanol

**Biodegradation** Water - Degradation 85%: 28 days

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

**Biodegradation** Water - Degradation >70%: 10 days

## 12.3. Bioaccumulative potential

**Bioaccumulative potential** Bioaccumulation is unlikely.

**Partition coefficient** Not determined.

### Ecological information on ingredients.

#### 2-(2-(2-butoxyethoxy)ethoxy)ethanol

**Partition coefficient** log Pow: 0.51

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

**Partition coefficient** log Pow: <0.5

## 12.4. Mobility in soil

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

## 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

## 12.6. Other adverse effects

**Other adverse effects** Not determined.

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

## STP® Synthetic Brake Fluid DOT 4

|                            |   |
|----------------------------|---|
| <b>General information</b> | Dispose of waste product or used containers in accordance with local regulations  |
| <b>Disposal methods</b>    | Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority. |

### SECTION 14: Transport information

|                |  |
|----------------|--|
| <b>General</b> | 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

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.

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended).

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)

(Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended).

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

## STP® Synthetic Brake Fluid DOT 4

|   |  |
|---|--|
| <b>Abbreviations and acronyms used in the safety data sheet</b> | <p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p> <p>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>IATA: International Air Transport Association.</p> <p>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.</p> <p>ATE: Acute Toxicity Estimate.</p> <p>DNEL: Derived No Effect Level.</p> <p>LC50: Lethal Concentration to 50 % of a test population.</p> <p>LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p> <p>BCF: Bioconcentration Factor.</p> |
| <b>Classification procedures according to SI 2019 No. 720</b>   | Eye Irrit. 2 - H319, Repr. 2 - H361d: Calculation method.  |
| <b>Revision comments</b>  | Section 1: Identification of the substance/mixture and of the company/undertaking // 1.3. Details of the supplier of the safety data sheet.  |
| <b>Revision date</b>  | 02/06/2021   |
| <b>Revision</b>   | 1  |
| <b>Supersedes date</b>  | 20/08/2020   |
| <b>SDS number</b>   | 1475   |
| <b>Hazard statements in full</b>                                | <p>H302 Harmful if swallowed.</p> <p>H318 Causes serious eye damage.</p> <p>H319 Causes serious eye irritation.</p> <p>H361d Suspected of damaging the unborn child.</p>   |

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