SAFETY DATA SHEET

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

1.1 Product identifier
Product name: Racing Dynamic BREMSFL. DOT5.1

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

Identified uses: Brake fluid
Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier:
Fuchs Schmierstoffe GmbH
Friesenheimer Str. 19
68169 Mannheim

Telephone: +49 621 3701-0 (ZENTRALE)
Fax: +49 621 3701-570

Contact Person:
Fuchs Schmierstoffe GmbH Abteilung Produktsicherheit
Telephone: +49 621 3701-1333
Fax: +49 621 3701-7303
E-mail: produktsicherheit-FS@fuchs.com

1.4 Emergency telephone number:
+49 621 3701-1333 / +49 621 3701-0 (Mo-Do 8-17, Fr 8-16)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to regulation (EU) 1272/2008 (CLP).

Classification according to Regulation (EC) No 1272/2008 as amended.

Environmental Hazards
Chronic hazards to the aquatic environment: Category 3
H412: Harmful to aquatic life with long lasting effects.

Hazard summary
Physical Hazards: No data available.

2.2 Label Elements

Hazard Statement(s): H412: Harmful to aquatic life with long lasting effects.
Product name: Racing Dynamic BREMSFL. DOT5.1

Precautionary Statements

Prevention: P273: Avoid release to the environment.

Supplemental label information

EUH208: Contains: Tolutriazole derivative. May produce an allergic reaction.

2.3 Other hazards:

By handling of mineral oil products and chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept. The product may not be released into the environment without control.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information: Mixture of synthetic base oils with additives.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Identifier</th>
<th>Concentration *</th>
<th>REACH Registration No.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycol</td>
<td>EINECS: 203-872-2</td>
<td>1.00 - &lt;5.00%</td>
<td>01-2119457857-21</td>
<td></td>
</tr>
<tr>
<td>Dicyclohexylamine</td>
<td>EINECS: 202-980-7</td>
<td>0.25 - &lt;1.00%</td>
<td>01-2119493354-33</td>
<td></td>
</tr>
<tr>
<td>Tolutriazole derivative</td>
<td>EINECS: 939-700-4</td>
<td>0.10 - &lt;1.00%</td>
<td>01-2119982395-25</td>
<td></td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

Classification

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Identifier</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycol</td>
<td>EINECS: 203-872-2</td>
<td>CLP: Acute Tox. 4; H302</td>
</tr>
<tr>
<td>Dicyclohexylamine</td>
<td>EINECS: 202-980-7</td>
<td>CLP: Acute Tox. 3; H301, Acute Tox. 3; H311, Skin Corr. 1B; H314, Aquatic Chronic 1; H410, Aquatic Acute 1; H400</td>
</tr>
<tr>
<td>Tolutriazole derivative</td>
<td>EINECS: 939-700-4</td>
<td>CLP: Skin Irrit. 2; H315, Skin Sens. 1B; H317, Aquatic Acute 1; H400, Aquatic Chronic 2; H411</td>
</tr>
</tbody>
</table>


For the wording of the listed hazard statements refer to section 16.

SECTION 4: First aid measures

General: Instantly remove any clothing soiled by the product.

4.1 Description of first aid measures

Inhalation: Supply fresh air; consult doctor in case of symptoms.

Eye contact: Promptly wash eyes with plenty of water while lifting the eye lids.

Skin Contact: Wash with soap and water.

Ingestion: Rinse mouth thoroughly.
Product name: Racing Dynamic BREMSFL. DOT5.1

4.2 Most important symptoms and effects, both acute and delayed:
May cause skin and eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed
Get medical attention if symptoms occur.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media:
CO2, fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant added

 Unsuitable extinguishing media:
Water with a full water jet.

5.2 Special hazards arising from the substance or mixture:
During fire, gases hazardous to health may be formed.

5.3 Advice for firefighters
Special fire fighting procedures:
Move container from fire area if it can be done without risk. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Collect contaminated fire fighting water separately. It must not enter drains.

Special protective equipment for fire-fighters:
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
In case of spills, beware of slippery floors and surfaces.

6.2 Environmental Precautions:
Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent from spreading (e.g. by binding or oil barriers). Environmental manager must be informed of all major spillages. Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acidbinders, universal binders, sawdust). Dispose of the material collected according to regulations. Stop the flow of material, if this is without risk.

6.4 Reference to other sections:
See Section 8 of the SDS for Personal Protective Equipment. See Section 7 for information on safe handling See Section 13 for information on disposal.
SECTION 7: Handling and storage

7.1 Precautions for safe handling:
Prevent formation of aerosols. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. Observe good industrial hygiene practices. Provide adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities:
Local regulations concerning handling and storage of waterpolluting products have to be followed.

7.3 Specific end use(s):
Not applicable

Storage Class:
10, Combustible liquids

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-(2-Methoxyethoxy)ethoxy)ethanol - inhalable fraction.</td>
<td>AGW</td>
<td>50 mg/m3</td>
<td>Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (09 2012)</td>
</tr>
<tr>
<td>Diglycol - Vapor and aerosol.</td>
<td>AGW</td>
<td>10 ppm 44 mg/m3</td>
<td>Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (09 2013)</td>
</tr>
<tr>
<td>Dicyclohexylamine - Vapor and aerosol.</td>
<td>AGW</td>
<td>0.7 ppm 5 mg/m3</td>
<td>Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (09 2013)</td>
</tr>
</tbody>
</table>

8.2 Exposure controls
Appropriate engineering controls:
Provide adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information:
Wash hands before breaks and after work. Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. The usual precautionary measures should be adhered to in handling the chemicals or the mineral oil products.

Eye/face protection:
Safety glasses (EN 166) recommended during refilling.
Skin protection

Min. Breakthrough time: >= 480 min
Recommended thickness of the material: >= 0.38 mm

Avoid long-term and repeated skin contact. Suitable gloves can be recommended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety directions. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Other: Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.

Respiratory Protection: Ensure good ventilation/exhaustion at the workplace. Avoid breathing vapour/ aerosol.

Thermal hazards: Not known.

Hygiene measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

Environmental Controls: No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance
- Physical state: liquid
- Color: Amber
- Odor: Characteristic
- Odor Threshold: Not applicable for mixtures
- pH: not applicable
- Freezing point: Not applicable for mixtures
- Boiling Point: Value not relevant for classification
- Flash Point: > 110 °C
- Evaporation Rate: Not applicable for mixtures
- Flammability (solid, gas): Value not relevant for classification
- Flammability Limit - Upper (%)--: Value not relevant for classification
- Flammability Limit - Lower (%)--: Value not relevant for classification
- Vapor pressure: Not applicable for mixtures
- Vapor density (air=1): Not applicable for mixtures
- Density: 1.06 g/cm³ (20 °C)
- Solubility(ies)
  - Solubility in Water: Miscible with water.
  - Solubility (other): No data available.
  - Partition coefficient (n-octanol/water): Not applicable for mixtures
**Product name:** Racing Dynamic BREMSFL. DOT5.1

- **Autoignition Temperature:** Value not relevant for classification
- **Decomposition Temperature:** Value not relevant for classification
- **Kinematic viscosity:** 17 mm²/s (20 °C)
- ** Explosive properties:** Value not relevant for classification
- **Oxidizing properties:** Value not relevant for classification

**SECTION 10: Stability and reactivity**

10.1 **Reactivity:** Stable under normal use conditions.

10.2 **Chemical Stability:** Stable under normal use conditions.

10.3 **Possibility of hazardous reactions:** Stable under normal use conditions.

10.4 **Conditions to avoid:** Stable under normal use conditions.

10.5 **Incompatible Materials:** Strong oxidizing substances. Strong acids. Strong bases.

10.6 **Hazardous Decomposition Products:** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

**SECTION 11: Toxicological information**

11.1 **Information on toxicological effects**

**Acute toxicity**

**Oral**
- **Product:** ATEmix: 16.175 mg/kg
- **Specified substance(s)**
  - Diglycol: LD 50 (Rat): 12.565 mg/kg, LD 50 (Human): 1.120 mg/kg
  - Dicyclohexylamine: LD 50 (Rat): 200 mg/kg
- **Tolutriazole derivative**
  - LD 50 (Rat, Female, Male): 3.313 mg/kg (OECD 401)

**Dermal**
- **Product:** ATEmix: 20.202 mg/kg
- **Specified substance(s)**
  - Diglycol: LD 50 (Rabbit): 11.890 mg/kg
  - Dicyclohexylamine: LD 50 (Rabbit): 200 - 316 mg/kg

**Inhalation**
- **Product:** Not classified for acute toxicity based on available data.
**Product name:** Racing Dynamic BREMSFL. DOT5.1

**Skin Corrosion/Irritation:**
- **Product:**
- **Specified substance(s):**
  - Diglycol
    - OECD 404 (Rabbit): Not irritant.
  - Dicyclohexylamine
    - (Rabbit, 24 h): Corrosive.
  - Tolutriazole derivative
    - (Rabbit): Irritating.

**Serious Eye Damage/Eye Irritation:**
- **Product:**
- **Specified substance(s):**
  - Dicyclohexylamine
    - (Rabbit): Corrosive to skin and eyes.
  - Tolutriazole derivative
    - OECD 405 (Rabbit): Not irritant.

**Respiratory or Skin Sensitization:**
- **Product:**
- **Specified substance(s):**
  - Diglycol
    - No sensitizing effect (guinea pig); OECD 406
  - Tolutriazole derivative
    - , OECD 406-1 (Guinea Pig) sensitizing

**Germ Cell Mutagenicity**
- **Product:**

**Carcinogenicity**
- **Product:**

**Reproductive toxicity**
- **Product:**

**Specific Target Organ Toxicity - Single Exposure**
- **Product:**

**Specific Target Organ Toxicity - Repeated Exposure**
- **Product:**

**Aspiration Hazard**
- **Product:**

**Other adverse effects:**
- No data available.
SECTION 12: Ecological information

12.1 Toxicity

**Acute toxicity**

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

**Fish**

**Specified substance(s)**

- Diglycol: LC 50 (Fish, 96 h): > 32,000 mg/l
- Dicyclohexylamine: LC 50 (Fish, 96 h): 32 - 46 mg/l
- Tolutriazole derivative: LC 50 (Fish, 96 h): 1,3 mg/l (OECD 203)

**Aquatic Invertebrates**

**Specified substance(s)**

- Diglycol: EC 50 (Water Flea, 48 h): > 10,000 mg/l
- Dicyclohexylamine: EC 50 (Water Flea, 48 h): 8 mg/l (OECD 202)
- Tolutriazole derivative: EC 50 (Water Flea, 48 h): 2,05 mg/l (OECD 202)

**Chronic Toxicity**

<table>
<thead>
<tr>
<th>Substance</th>
<th>NOEC (Water Flea, 21 d)</th>
<th>EC 50 (Alga, 72 h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicyclohexylamine</td>
<td>0,016 mg/l (OECD 211)</td>
<td>0,38 mg/l</td>
</tr>
<tr>
<td>Tolutriazole derivative</td>
<td>0,976 mg/l (OECD 201)</td>
<td></td>
</tr>
</tbody>
</table>

12.2 Persistence and Degradability

**Biodegradation**

**Product:** Not applicable for mixtures

**Specified substance(s)**

- Diglycol: 92 % (28 d, OECD 301A)
- Dicyclohexylamine: 77 % (14 d, OECD 301C) Readily biodegradable
- Tolutriazole derivative: Not readily degradable.

12.3 Bioaccumulative potential

**Product:** Not applicable for mixtures

12.4 Mobility in soil

**Product:** Not applicable for mixtures

12.5 Results of PBT and vPvB assessment

The product does not contain any substances fulfilling the PBT/vPvB criteria.
12.6 Other adverse effects: Harmful to aquatic life with long lasting effects.


SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: Dispose in accordance with all applicable regulations.

Disposal methods: Discharge, treatment, or disposal may be subject to national, state, or local laws.

European Waste Codes

16 01 13*: brake fluids

SECTION 14: Transport information

ADR/RID

14.1 UN Number: –
14.2 UN Proper Shipping Name: –
14.3 Transport Hazard Class(es)
   Class: Non-dangerous goods
   Label(s): –
   Hazard No. (ADR): –
   Tunnel restriction code: –
14.4 Packing Group: –
14.5 Environmental hazards: –
14.6 Special precautions for user: –

ADN

14.1 UN Number: –
14.2 UN Proper Shipping Name: –
14.3 Transport Hazard Class(es)
   Class: Non-dangerous goods
   Label(s): –
14.3 Packing Group: –
14.5 Environmental hazards: –
14.6 Special precautions for user: –
**Product name:** Racing Dynamic BREMSFL. DOT5.1

**IMDG**

14.1 UN Number: –
14.2 UN Proper Shipping Name: –
14.3 Transport Hazard Class(es):
   Class: Non-dangerous goods
   Label(s): –
   EmS No.: –
14.4 Packing Group: –
14.5 Environmental hazards: –
14.6 Special precautions for user: –

**IATA**

14.1 UN Number: –
14.2 Proper Shipping Name: –
14.3 Transport Hazard Class(es):
   Class: Non-dangerous goods
   Label(s): –
14.4 Packing Group: –
14.5 Environmental hazards: –
14.6 Special precautions for user: –

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable.

**SECTION 15: Regulatory information**

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

**EU Regulations**

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none


**National Regulations**

Water Hazard Class (WGK):

WGK 1: slightly water-endangering.

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

**SECTION 16: Other information**

Revision Information: Vertical lines in the margin indicate an amendment.
**Product name:** Racing Dynamic BREMSFL. DOT5.1

**Wordings of the H-statements in section 2 and 3**

- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

**Other information:**
The classification complies with the current EU lists; however, it has been supplemented with expert literature information and information provided by/about our company. It was derived from the test data and/or the application of the conventional method.

**Revision Date:** 23.10.2019

**Disclaimer:**
The data contained in this safety data sheet are based on our current knowledge and experience and are given to the best of our knowledge and belief. It characterizes the product only with regard to safety requirements for handling, transport and disposal. The data do not describe the product's properties (tech. product specification). Neither should any agreed property nor the suitability of the product for any specific technical application be deduced from the data contained in this safety data sheet. Modifications on this document are not allowed. The data are not transferable to other products. In the case of mixing the product with other products or in the case of processing, the data in this safety data sheet are not necessarily valid for the new-made material. It is the responsibility of the recipient of the product to observe federal, state and local law. Please contact us to obtain up-to-date safety data sheets. This document was issued electronically and has no signature.