



## SAFETY DATA SHEET NESTE PRO BRAKE FLUID

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

#### 1.1. Product identifier

Product name                    NESTE PRO BRAKE FLUID  
Product number                ID 18829  
Internal identification        7921

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

Identified uses                Car chemical. Brake fluid.

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

Supplier                        Neste Markkinointi Oy  
Keilaranta 21, Espoo, P.O.B. 95, FIN-00095 NESTE, FINLAND  
Tel. +358 10 45811  
lubetec@neste.com

#### 1.4. Emergency telephone number

National emergency telephone number +358-9-471 977, +358-9-4711, Poison Information Centre number

### SECTION 2: Hazards identification

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

##### Classification (EC 1272/2008)

Physical hazards                Not Classified  
Health hazards                 Not Classified  
Environmental hazards        Not Classified

#### 2.2. Label elements

Hazard statements              NC Not Classified

#### 2.3. Other hazards

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<b>2-[2-(2-butoxyethoxy)ethoxy]ethanol</b>	<b>&lt; 15 %</b>
CAS number: 143-22-6	EC number: 205-592-6
	REACH registration number: 01-2119475107-38-XXXX

#### Classification

Eye Dam. 1 - H318

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<b>1,1'-iminodipropan-2-ol</b>		<b>&lt; 2 %</b>
CAS number: 110-97-4	EC number: 203-820-9	REACH registration number: 01-2119475444-34-XXXX
<b>Classification</b> Eye Irrit. 2 - H319		
<b>2,2' -oxybisethanol</b>		<b>&lt; 2 %</b>
CAS number: 111-46-6	EC number: 203-872-2	REACH registration number: 01-2119457857-21-XXXX
<b>Classification</b> Acute Tox. 4 - H302 STOT RE 2 - H373		
<b>2-(2-methoxyethoxy)ethanol</b>		<b>0,1 - &lt; 0,5 %</b>
CAS number: 111-77-3	EC number: 203-906-6	REACH registration number: 01-2119475100-52-XXXX
<b>Classification</b> Repr. 2 - H361d		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>Inhalation</b>	Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms are severe or persist.
<b>Ingestion</b>	Rinse mouth. Do not induce vomiting unless under the direction of medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms are severe or persist.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water.
<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 irritation persists after washing.

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

**General information** No specific health hazards known.

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

**Notes for the doctor** Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Water spray, foam, dry powder or carbon dioxide.
<b>Unsuitable extinguishing media</b>	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** Vapour from this product may be hazardous by inhalation.

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**Hazardous combustion products**                      None known.

### 5.3. Advice for firefighters

**Protective actions during firefighting**                      Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Contain and collect extinguishing water. Avoid discharge into drains.

**Special protective equipment for firefighters**                      Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions**                      Wear suitable protective clothing as protection against splashing or contamination.

**For emergency responders**                      Keep unnecessary and unprotected personnel away from the spillage.

### 6.2. Environmental precautions

**Environmental precautions**                      Stop leak if safe to do so. Avoid the spillage or runoff entering drains, sewers or watercourses.

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

**Methods for cleaning up**                      Small Spillages: Absorb spillage with inert, damp, non-combustible material. Large spills should be collected mechanically (remove by pumping) for disposal. Dispose of waste via a licensed waste disposal contractor.

### 6.4. Reference to other sections

**Reference to other sections**                      For personal protection, see Section 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions**                      All handling should only take place in well-ventilated areas. Take precautionary measures against static discharges. For personal protection, see Section 8.

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

**Storage precautions**                      Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store at temperatures between 0°C and 40°C.

### 7.3. Specific end use(s)

**Specific end use(s)**                      Not known.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

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

2-(2-methoxyethoxy)ethanol: 10 ppm (8h), 50 mg/m<sup>3</sup> (8h), HTP 2016/FIN, EU OELV (EC/2006/15).  
May be absorbed through the skin.

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

#### **DNEL**

Workers - Dermal; Long term systemic effects: 0,3 mg/kg/day  
Workers - Inhalation; Long term systemic effects: 25 mg/m<sup>3</sup>  
Workers - Oral; Long term systemic effects: 1,5 mg/kg/day  
Consumer - Inhalation; Long term systemic effects: 10 ppm

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<b>PNEC</b>	<ul style="list-style-type: none"> <li>- Marine water; 1,2 mg/l</li> <li>- Sediment (Freshwater); 12 mg/l</li> <li>- Intermittent release; 12 mg/l</li> <li>- STP; 10 000 mg/l</li> </ul>
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### 8.2. Exposure controls

<b>Appropriate engineering controls</b>	All handling should only take place in well-ventilated areas. Eye wash facilities and emergency shower must be available when handling this product.
<b>Eye/face protection</b>	Tight-fitting safety glasses.
<b>Hand protection</b>	Wear protective gloves. It is recommended that gloves are made of the following material: Butyl rubber. Nitrile rubber. Protection class min. 2 The selected gloves should have a breakthrough time of at least > 0,5 hours. Protective gloves according to standards EN 420 and EN 374. Change protective gloves regularly.
<b>Other skin and body protection</b>	Wear suitable protective clothing as protection against splashing or contamination.
<b>Respiratory protection</b>	Breathing apparatus needed only when aerosol or mist is formed. Check that the respirator fits tightly and the filter is changed regularly. Filter devices must not be used in conditions where the oxygen level is low (< 19 vol.-%). Filter device could be used maximum 2 hours at a time. Particulate filter, type P2. (FFP2) Particulate filters should comply with European Standard EN143.
<b>Environmental exposure controls</b>	Store in a demarcated bunded area to prevent release to drains and/or watercourses.

## SECTION 9: Physical and Chemical Properties

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

<b>Appearance</b>	Liquid.
<b>Colour</b>	Amber. Yellowish.
<b>Odour</b>	Characteristic.
<b>Odour threshold</b>	-
<b>pH</b>	pH (diluted solution): 7,7 (50%)
<b>Melting point</b>	Pour point < -50 °C (DIN 51583)
<b>Initial boiling point and range</b>	271 °C (ASTM D1120)
<b>Flash point</b>	137,5°C (DIN EN 22719; ISO 2719)
<b>Flammability (solid, gas)</b>	-
<b>Upper/lower flammability or explosive limits</b>	-
<b>Vapour pressure</b>	1 hPa (50 °C), 1 hPa (20 °C)
<b>Vapour density</b>	-
<b>Relative density</b>	1,06 @ 20°C (DIN 51757)
<b>Solubility(ies)</b>	Completely soluble in water.
<b>Partition coefficient</b>	-
<b>Auto-ignition temperature</b>	230°C (DIN 51794)

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<b>Decomposition Temperature</b>	-
<b>Viscosity</b>	11,5 mm <sup>2</sup> /s @ 23°C (ASTM D445)
<b>Explosive properties</b>	Not considered to be explosive.
<b>Oxidising properties</b>	-

### 9.2. Other information

<b>Other information</b>	Hygroscopic.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
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### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
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### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	No potentially hazardous reactions known.
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### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid exposure to high temperatures or direct sunlight.
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### 10.5. Incompatible materials

<b>Materials to avoid</b>	Oxidising agents. Moisture.
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### 10.6. Hazardous decomposition products

<b>Hazardous decomposition products</b>	Does not decompose when used and stored as recommended.
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

<b>Toxicological effects</b>	Based on available data the classification criteria are not met.
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#### Acute toxicity - oral

<b>Notes (oral LD<sub>50</sub>)</b>	LD <sub>50</sub> > 2000 mg/kg, Oral, Rat
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<b>ATE oral (mg/kg)</b>	26,315.79
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#### Skin corrosion/irritation

<b>Skin corrosion/irritation</b>	Based on available data the classification criteria are not met.
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#### Serious eye damage/irritation

<b>Serious eye damage/irritation</b>	Based on available data the classification criteria are not met.
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#### Respiratory sensitisation

<b>Respiratory sensitisation</b>	Based on available data the classification criteria are not met.
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#### Skin sensitisation

<b>Skin sensitisation</b>	Based on available data the classification criteria are not met.
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#### Germ cell mutagenicity

<b>Genotoxicity - in vivo</b>	Based on available data the classification criteria are not met.
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#### Carcinogenicity

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

### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development** Based on available data the classification criteria are not met.

### Specific target organ toxicity - single exposure

**STOT - single exposure** Based on available data the classification criteria are not met.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Based on available data the classification criteria are not met.

### Aspiration hazard

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

**General information** Toxicological data are based on tests with corresponding products or components.

### Toxicological information on ingredients.

#### 2,2' -oxybisethanol

##### Acute toxicity - oral

**ATE oral (mg/kg)** 500.0

#### 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

## SECTION 12: Ecological Information

### 12.1. Toxicity

**Toxicity** The product is not expected to be hazardous to the environment. Based on available data the classification criteria are not met.

### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: > 100 mg/l, *Leuciscus idus* (Golden orfe)

### Ecological information on ingredients.

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

##### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 5741 mg/l,

**Acute toxicity - aquatic invertebrates** LC<sub>50</sub>, 48 hours: 1192 mg/l,

**Acute toxicity - aquatic plants** LC<sub>50</sub>, 96 hours: > 1000 mg/l, Algae

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### Acute toxicity - microorganisms

LC<sub>50</sub>, 0,5 hours: > 1995 mg/l, Activated sludge

### 12.2. Persistence and degradability

**Persistence and degradability** No data available.

**Biodegradation** The product is readily biodegradable.  
(OECD 302B; ISO 9888)

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** Bioaccumulation is unlikely.

**Partition coefficient** -

### 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** No data available.

### 12.6. Other adverse effects

**Other adverse effects** None known. Toxicological data are based on tests with corresponding products or components.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Do not reuse empty containers.

## 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

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**UN No. (ADR/RID)** -

### 14.2. UN proper shipping name

**Proper shipping name  
(ADR/RID)** -

### 14.3. Transport hazard class(es)

**ADR/RID class** -

### 14.4. Packing group

**ADR/RID packing group** -

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**  
No.

### 14.6. Special precautions for user

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Not applicable.

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

**Transport in bulk according to Annex II of MARPOL 73/78 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 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).  
Commission Regulation (EU) No 2015/830 of 28 May 2015.  
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

#### 15.2. Chemical safety assessment

No data available.

### SECTION 16: Other information

**Abbreviations and acronyms used in the safety data sheet** ATE = Acute Toxicity Estimate  
DNEL = Derived No-Effect Level  
PNEC = Predicted No-Effect Concentration

**Key literature references and sources for data** The manufacturer's SDS. 14.3.2017

**Revision comments** Updated, sections: 1

**Revision date** 01/11/2017

**Supersedes date** 06/04/2017

**SDS number** 5794

**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.