



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

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

Classification

Eye Dam. 1 - H318

NESTE PRO BRAKE FLUID

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

Inhalation	Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms are severe or persist.
Ingestion	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.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	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

Suitable extinguishing media	Water spray, foam, dry powder or carbon dioxide.
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 Vapour from this product may be hazardous by inhalation.

NESTE PRO BRAKE FLUID

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/m³ (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/m³
Workers - Oral; Long term systemic effects: 1,5 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 10 ppm

NESTE PRO BRAKE FLUID

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

Appropriate engineering controls	All handling should only take place in well-ventilated areas. Eye wash facilities and emergency shower must be available when handling this product.
Eye/face protection	Tight-fitting safety glasses.
Hand protection	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.
Other skin and body protection	Wear suitable protective clothing as protection against splashing or contamination.
Respiratory protection	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.
Environmental exposure controls	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

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

NESTE PRO BRAKE FLUID

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

9.2. Other information

Other information	Hygroscopic.
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SECTION 10: Stability and reactivity

10.1. Reactivity

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

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No potentially hazardous reactions known.
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10.4. Conditions to avoid

Conditions to avoid	Avoid exposure to high temperatures or direct sunlight.
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10.5. Incompatible materials

Materials to avoid	Oxidising agents. Moisture.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects	Based on available data the classification criteria are not met.
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Acute toxicity - oral

Notes (oral LD₅₀)	LD ₅₀ > 2000 mg/kg, Oral, Rat
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ATE oral (mg/kg)	26,315.79
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Skin corrosion/irritation

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

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

Respiratory sensitisation	Based on available data the classification criteria are not met.
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Skin sensitisation

Skin sensitisation	Based on available data the classification criteria are not met.
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Germ cell mutagenicity

Genotoxicity - in vivo	Based on available data the classification criteria are not met.
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Carcinogenicity

NESTE PRO BRAKE FLUID

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 LD₅₀) LD₅₀ 7128 mg/kg, Oral, Mouse

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 9404 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ > 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 LC₅₀, 96 hours: > 100 mg/l, *Leuciscus idus* (Golden orfe)

Ecological information on ingredients.

2-(2-methoxyethoxy)ethanol

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 5741 mg/l,

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 1192 mg/l,

Acute toxicity - aquatic plants LC₅₀, 96 hours: > 1000 mg/l, Algae

NESTE PRO BRAKE FLUID

Acute toxicity - microorganisms

LC₅₀, 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

NESTE PRO BRAKE FLUID

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

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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.