

NESTE OIL

SAFETY DATA SHEET NESTE SUPERJÄÄHDYTINNESTE XLC 60 %

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

1.1. Product identifier

Product name	NESTE SUPERJÄÄHDYTINNESTE XLC 60 %
Product number	ID 16320
Internal identification	7735

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

Identified uses	Antifreeze liquid.
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1.3. Details of the supplier of the safety data sheet

Supplier

Neste Markkinointi Oy
Keilaranta 21, Espoo, P.O.B. 95, 00095 NESTE OIL, FINLAND
Tel. +358 10 45811
Fax +358 10 45 84442
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

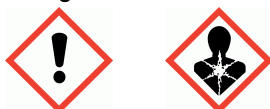
2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Acute Tox. 4 - H302 STOT RE 2 - H373
Environmental hazards	Not Classified

2.2. Label elements

Pictogram



Signal word

Warning

Hazard statements

H302 Harmful if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P260 Do not breathe vapour/ spray.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P102 Keep out of reach of children.

Contains

Ethane-1,2-diol

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2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Ethane-1,2-diol		48 - 59 %
CAS number: 107-21-1	EC number: 203-473-3	REACH registration number: 01-2119456816-28-XXXX

Classification

Acute Tox. 4 - H302
STOT RE 2 - H373

Sodium 2-ethylhexanoate		1,8 - < 3 %
CAS number: 19766-89-3	EC number: 243-283-8	REACH registration number: 01-2119979083-31-XXXX

Classification

Repr. 2 - H361

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. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.
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 Harmful if swallowed. May cause nausea, headache, dizziness and intoxication.

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

Notes for the doctor Development of symptoms may be delayed for 24 to 48 hours. Keep affected person under observation.

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	None known.
Hazardous combustion products	Carbon dioxide (CO ₂). Carbon monoxide (CO). Hydrocarbons. Aldehydes. Ketones.

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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 Absorb spillage with non-combustible, absorbent material. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air). 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 Avoid inhalation of vapours/spray and contact with skin and eyes. All handling should only take place in well-ventilated areas. Take precautionary measures against static discharge. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. 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. Keep away from food, drink and animal feeding stuffs.

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

Ethane-1,2-diol

1,2-ethanediol: 20 ppm (8h), 50 mg/m³ (8h), 40 ppm (15 min), 100 mg/m³ (15 min), HTP 2016/FIN.

1,2-ethanediol: 20 ppm (8h TWA), 52 mg/m³ (8h TWA), 40 ppm (15min STEL), 104 mg/m³ (15min STEL) EU OELV (EC/2000/39).

Skin

8.2. Exposure controls

Appropriate engineering controls All handling should only take place in well-ventilated areas.

Eye/face protection Safety goggles if there is a risk of splashing.

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Hand protection	Wear protective gloves. It is recommended that gloves are made of the following material: Neoprene. Polyvinyl chloride (PVC). Nitrile rubber.
Other skin and body protection	Protective clothing when needed.
Respiratory protection	Breathing apparatus needed only when aerosol or mist is formed. Wear a respirator fitted with the following cartridge: Gas filter, type A2.
Environmental exposure controls	Store in a demarcated banded 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	Red.
Odour	Mild.
Odour threshold	-
pH	pH (concentrated solution): 8,5
Melting point	-
Initial boiling point and range	> 180 °C Estimated value.
Flash point	> 100°C Estimated value.
Flammability (solid, gas)	-
Upper/lower flammability or explosive limits	1,2-ethanediol: Lower flammable/explosive limit: 3,2 Upper flammable/explosive limit: 15,3
Vapour pressure	-
Vapour density	-
Relative density	1,1 @ 15°C
Solubility(ies)	Completely soluble in water.
Partition coefficient	1,2-ethanediol: log Pow: 1,4
Auto-ignition temperature	-
Decomposition Temperature	-
Viscosity	-
Explosive properties	-
Oxidising properties	-
9.2. Other information	
Other information	Not known.

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

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Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid Oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects Harmful if swallowed.

Acute toxicity - oral

ATE oral (mg/kg) 847.46

Skin corrosion/irritation

Skin corrosion/irritation May cause skin irritation., Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation May cause eye and respiratory system irritation. Based on available data the classification criteria are not met.

Respiratory sensitisation

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

Skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

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.

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 May cause damage to organs through prolonged or repeated exposure.

Target organs

Kidneys

Aspiration hazard

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

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Ethane-1,2-diol

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 4700 mg/kg, Oral, Rat

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 9530 mg/kg, Dermal, Rabbit

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.

Ethane-1,2-diol

Acute toxicity - fish LC₅₀, 96 hours: 41000-57000 mg/l,

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 46300-57600 mg/l,

Acute toxicity - aquatic plants EC₅₀, 96 hours: 6500-13000 mg/l,

12.2. Persistence and degradability

Persistence and degradability Degradable by atmospheric chemistry.

Biodegradation The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient 1,2-ethanediol: log Pow: 1,4

12.4. Mobility in soil

Mobility The product is water-soluble and may spread in water systems.

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 None known.

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).

NESTE SUPERJÄÄHDYTTINNESTE XLC 60 %**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 hazardsEnvironmentally 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 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
TWA = Time-Weighted Average

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

Revision comments Updated, sections: 2, 3, 8, 11, 16

Revision date 23/02/2017

Supersedes date 27/05/2015

SDS number 4923

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Hazard statements in full

H302 Harmful if swallowed.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.