# SAFETY DATA SHEET
# NESTE SUPERJÄÄHDYTINNESTE XLC 50 %

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

### 1.1. Product identifier

**Product name** NESTE SUPERJÄÄHDYTINNESTE XLC 50 %

**Product number** ID 13979

**Internal identification** 7736

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

**Identified uses** Antifreeze liquid.

### 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

## 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** | | **40 - 49 %** |
| 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** | | **1,5 - < 2,5 %** |
| 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 (CO2). 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 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** | Reddish. |
| **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)** 1,020.41

**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.

# NESTE SUPERJÄÄHDYTINNESTE XLC 50 %

**Ethane-1,2-diol**

| | |
|---|---|
| **Acute toxicity - oral** | |
| **Notes (oral $LD_{50}$)** | $LD_{50}$ 4700 mg/kg, Oral, Rat |
| **ATE oral (mg/kg)** | 500.0 |
| **Acute toxicity - dermal** | |
| **Notes (dermal $LD_{50}$)** | $LD_{50}$ 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** | $LC_{50}$, 96 hours: 41000-57000 mg/l, |
| **Acute toxicity - aquatic invertebrates** | $LC_{50}$, 48 hours: 46300-57600 mg/l, |
| **Acute toxicity - aquatic plants** | $EC_{50}$, 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).

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### 14.1. UN number

-

**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

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** 4921

# NESTE SUPERJÄÄHDYTINNESTE XLC 50 %

**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.