



## SAFETY DATA SHEET NESTE SWITCH 3 X

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

#### 1.1. Product identifier

Product name	NESTE SWITCH 3 X
Product number	ID 19086
Internal identification	4141
Synonyms; trade names	Previous product name: NESTE KATKAISIJA 3X, product number 5095, ID 12954.

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

Identified uses	Lubricant.
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#### 1.3. Details of the supplier of the safety data sheet

##### Supplier

Neste Markkinointi Oy  
Keilaranta 21, Espoo, PL 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	Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Asp. Tox. 1 - H304
Environmental hazards	Aquatic Chronic 2 - H411

#### 2.2. Label elements

##### Pictogram



##### Signal word

Danger

##### Hazard statements

H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H332 Harmful if inhaled.  
H411 Toxic to aquatic life with long lasting effects.

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**Precautionary statements**

P273 Avoid release to the environment.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 P331 Do NOT induce vomiting.  
 P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
 P280 Wear protective gloves.

**Contains** Distillates (petroleum), hydrotreated middle , Distillates (petroleum), hydrotreated light naphthenic

### 2.3. Other hazards

**Other hazards** Risk of soil and ground water contamination.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>Distillates (petroleum), hydrotreated middle</b>	<b>80 - 90 %</b>
CAS number: 64742-46-7	EC number: 265-148-2
	REACH registration number: 01-2119489867-12-XXXX
<b>Classification</b>	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Asp. Tox. 1 - H304	
Aquatic Chronic 2 - H411	
<b>Distillates (petroleum), hydrotreated light naphthenic</b>	<b>10 - 20 %</b>
CAS number: 64742-53-6	EC number: 265-156-6
	REACH registration number: 01-2119480375-34-XXXX
<b>Classification</b>	
Asp. Tox. 1 - H304	
<b>2,6-di-tert-butyl-p-cresol (BHT)</b>	<b>0 - &lt; 0,3 %</b>
CAS number: 128-37-0	EC number: 204-881-4
	REACH registration number: 01-2119565113-46-XXXX
M factor (Acute) = 1	M factor (Chronic) = 1
<b>Classification</b>	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	

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

**Other information** DMSO < 3% (IP 346).

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**Inhalation** Remove person to fresh air and keep comfortable for breathing. If breathing stops, provide artificial respiration. For breathing difficulties, oxygen may be necessary. Get medical attention if symptoms are severe or persist.

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<b>Ingestion</b>	Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. Continue to rinse for at least 10 minutes. Get medical attention if irritation persists after washing.
<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

<b>General information</b>	Aspiration hazard if swallowed. Harmful if inhaled. Irritating to skin. Repeated exposure may cause skin dryness or cracking.
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### 4.3. Indication of any immediate medical attention and special treatment needed

<b>Notes for the doctor</b>	Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis. Treat symptomatically.
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Foam, carbon dioxide or dry powder.
<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

<b>Specific hazards</b>	None known.
<b>Hazardous combustion products</b>	Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). Hydrocarbons. Sulphuryl compounds.

### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	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.
<b>Special protective equipment for firefighters</b>	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

<b>Personal precautions</b>	Wear suitable protective clothing as protection against splashing or contamination.
<b>For emergency responders</b>	Keep unnecessary and unprotected personnel away from the spillage.

### 6.2. Environmental precautions

<b>Environmental precautions</b>	Stop leak if safe to do so. Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillage with sand, earth or other suitable non-combustible material. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).
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### 6.3. Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	Absorb spillage with sand or other inert absorbent. Place waste in labelled, sealed containers. Dispose of waste via a licensed waste disposal contractor.
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### 6.4. Reference to other sections

<b>Reference to other sections</b>	For personal protection, see Section 8. For waste disposal, see Section 13.
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## SECTION 7: Handling and storage

## NESTE SWITCH 3 X

### 7.1. Precautions for safe handling

**Usage precautions** Avoid inhalation of vapours and spray/mists. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. 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. Keep containers upright. 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

#### 2,6-di-tert-butyl-p-cresol (BHT)

2,6-di-tert-butyl-p-cresol (BHT): 10 mg/m<sup>3</sup> (8h), 20 mg/m<sup>3</sup> (15min), HTP 2016/FIN

#### 2,6-di-tert-butyl-p-cresol (BHT) (CAS: 128-37-0)

<b>DNEL</b>	Workers - Dermal; Long term systemic effects: 0,5 mg/kg/day Workers - Inhalation; Long term systemic effects: 3,5 mg/m <sup>3</sup>
<b>PNEC</b>	- Fresh water; 0,199 µg/l - Marine water; 0,0199 µg/l - Fresh water, Intermittent release; 1,99 µg/l - Sediment (Freshwater); 99,6 mg/kg - Sediment (Marinewater); 9,96 mg/kg - Soil; 47,69 µg/kg

### 8.2. Exposure controls

**Appropriate engineering controls** Handle in accordance with good industrial hygiene and safety practice. Avoid inhalation of vapours and spray/mists. All handling should only take place in well-ventilated areas. Avoid contact with skin, eyes and clothing. Provide eyewash station and safety shower.

**Eye/face protection** Tight-fitting safety glasses.

**Hand protection** Wear protective gloves. It is recommended that gloves are made of the following material: Nitrile rubber. Butyl rubber.

**Other skin and body protection** Wear suitable protective clothing as protection against splashing or contamination.

**Respiratory protection** If ventilation is inadequate, suitable respiratory protection must be worn. Filter device/half mask Combination filter, type A2/P2. Filter device could be used maximum 2 hours at a time. Filter devices must not be used in conditions where the oxygen level is low (< 19 vol.-%). Filter must be changed often enough. Respirators according to standards EN 140 and EN 141.

**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

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<b>Appearance</b>	Liquid.
<b>Colour</b>	Clear. Yellowish.
<b>Odour</b>	Mild.
<b>Odour threshold</b>	-
<b>pH</b>	-
<b>Melting point</b>	< -70°C Pour point
<b>Initial boiling point and range</b>	> 250 °C
<b>Flash point</b>	> 94°C PMCC (Pensky-Martens closed cup).
<b>Flammability (solid, gas)</b>	-
<b>Upper/lower flammability or explosive limits</b>	-
<b>Vapour pressure</b>	0,16 kPa @ 100°C
<b>Vapour density</b>	-
<b>Relative density</b>	0,86 @ 15°C
<b>Solubility(ies)</b>	Insoluble in water.
<b>Partition coefficient</b>	log Kow: > 3
<b>Auto-ignition temperature</b>	> 270°C
<b>Decomposition Temperature</b>	> 280°C
<b>Viscosity</b>	2,9 mm <sup>2</sup> /s @ 40°C
<b>Explosive properties</b>	-
<b>Oxidising properties</b>	-

### 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

**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** Avoid exposure to high temperatures or direct sunlight.

### 10.5. Incompatible materials

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrocarbons. Sulphuryl compounds.

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### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Toxicological effects** Harmful if inhaled.

#### Acute toxicity - inhalation

**ATE inhalation (vapours mg/l)** 13.75

#### Skin corrosion/irritation

**Skin corrosion/irritation** Irritating to skin., Repeated exposure may cause skin dryness or cracking.

#### Serious eye damage/irritation

**Serious eye damage/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.

**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** May be fatal if swallowed and enters airways. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

#### Distillates (petroleum), hydrotreated middle

##### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** LD<sub>50</sub> > 5000 mg/kg, Oral, Rat

##### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** LD<sub>50</sub> > 2000 mg/kg, Dermal, Rabbit

##### Acute toxicity - inhalation

**ATE inhalation (vapours mg/l)** 11.0

#### Distillates (petroleum), hydrotreated light naphthenic

##### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** LD<sub>50</sub> > 5000 mg/kg, Oral, Rat

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### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** LD<sub>50</sub> > 2000 mg/kg, Dermal, Rabbit

### 2,6-di-tert-butyl-p-cresol (BHT)

### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** LD<sub>50</sub> > 6000 mg/kg, Oral, Rat (OECD TG 401)

### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** LD<sub>50</sub> > 2000 mg/kg, Dermal, Rat (OECD 402)

## SECTION 12: Ecological Information

### 12.1. Toxicity

**Toxicity** Toxic to aquatic life with long lasting effects.

### 2,6-di-tert-butyl-p-cresol (BHT)

#### Acute aquatic toxicity

**LE(C)<sub>50</sub>** 0.1 < L(E)C<sub>50</sub> ≤ 1

**M factor (Acute)** 1

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 0,199 mg/l, Algae  
Estimated value.  
(QSAR)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 0,48 mg/l, Daphnia magna  
(OECD TG 202)

#### Chronic aquatic toxicity

**M factor (Chronic)** 1

**Chronic toxicity - fish early life stage** NOEC, 42 days: 0,053 mg/l, Oryzias latipes (Red killifish)

### 12.2. Persistence and degradability

**Persistence and degradability** No data available.

**Biodegradation** Not readily biodegradable.

### 2,6-di-tert-butyl-p-cresol (BHT)

**Biodegradation** 4,5 %, 28 d (OECD TG 301C)

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** Possibly bioaccumulative.

**Partition coefficient** log Kow: > 3

### 2,6-di-tert-butyl-p-cresol (BHT)

**Partition coefficient** log Pow: 4,17 (21 °C)

### 12.4. Mobility in soil

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**Mobility** The product is insoluble in water. Mainly non-volatile. Product can penetrate soil until reaching the surface of ground water. Risk of soil and ground water contamination.

### 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.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal methods** Waste is classified as hazardous waste. 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

### 14.1. UN number

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**UN No. (ADR/RID)** 3082

### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Distillates (petroleum) hydrotreated middle)

### 14.3. Transport hazard class(es)

**ADR/RID class** 9

### 14.4. Packing group

**ADR/RID packing group** III

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**  
MARINE POLLUTANT

### 14.6. Special precautions for user

Not applicable.

**Tunnel restriction code** (E)

### 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



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**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

<b>Abbreviations and acronyms used in the safety data sheet</b>	ATE = Acute Toxicity Estimate DNEL = Derived No-Effect Level PNEC = Predicted No-Effect Concentration
<b>Key literature references and sources for data</b>	The manufacturer's SDS. 1.9.2015
<b>Revision comments</b>	Product name change.
<b>Revision date</b>	01/09/2017
<b>Supersedes date</b>	01/07/2016
<b>SDS number</b>	5659
<b>Hazard statements in full</b>	H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H332 Harmful if inhaled. 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.