



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 +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

Distillates (petroleum), hydrotreated middle	80 - 90 %
CAS number: 64742-46-7	EC number: 265-148-2
	REACH registration number: 01-2119489867-12-XXXX
Classification	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Asp. Tox. 1 - H304	
Aquatic Chronic 2 - H411	
Distillates (petroleum), hydrotreated light naphthenic	10 - 20 %
CAS number: 64742-53-6	EC number: 265-156-6
	REACH registration number: 01-2119480375-34-XXXX
Classification	
Asp. Tox. 1 - H304	
2,6-di-tert-butyl-p-cresol (BHT)	0 - < 0,3 %
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
Classification	
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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Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Skin contact	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.
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	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

Notes for the doctor	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

Suitable extinguishing media	Foam, carbon dioxide or dry powder.
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 monoxide (CO). Carbon dioxide (CO ₂). Hydrocarbons. Sulphuryl compounds.

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. 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

Methods for cleaning up	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

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

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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/m³ (8h), 20 mg/m³ (15min), HTP 2016/FIN

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

DNEL	Workers - Dermal; Long term systemic effects: 0,5 mg/kg/day Workers - Inhalation; Long term systemic effects: 3,5 mg/m ³
PNEC	- 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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Appearance	Liquid.
Colour	Clear. Yellowish.
Odour	Mild.
Odour threshold	-
pH	-
Melting point	< -70°C Pour point
Initial boiling point and range	> 250 °C
Flash point	> 94°C PMCC (Pensky-Martens closed cup).
Flammability (solid, gas)	-
Upper/lower flammability or explosive limits	-
Vapour pressure	0,16 kPa @ 100°C
Vapour density	-
Relative density	0,86 @ 15°C
Solubility(ies)	Insoluble in water.
Partition coefficient	log Kow: > 3
Auto-ignition temperature	> 270°C
Decomposition Temperature	> 280°C
Viscosity	2,9 mm ² /s @ 40°C
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

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 (CO₂). 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 LD₅₀) LD₅₀ > 5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 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 LD₅₀) LD₅₀ > 5000 mg/kg, Oral, Rat

NESTE SWITCH 3 X

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rabbit

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

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 6000 mg/kg, Oral, Rat (OECD TG 401)

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 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)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 0,199 mg/l, Algae
Estimated value.
(QSAR)

Acute toxicity - aquatic invertebrates EC₅₀, 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

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. 1.9.2015

Revision comments

Product name change.

Revision date

01/09/2017

Supersedes date

01/07/2016

SDS number

5659

Hazard statements in full

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.