



SAFETY DATA SHEET

NESTE TURBO+ LSA 10W-40

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

1.1. Product identifier

| | |
|-------------------------|-------------------------|
| Product name | NESTE TURBO+ LSA 10W-40 |
| Product number | ID 20170 |
| Internal identification | 1874 |

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

| | |
|-----------------|-------------|
| Identified uses | Engine oil. |
|-----------------|-------------|

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 |
| Supplemental label information | EUH210 Safety data sheet available on request. |

2.3. Other hazards

| | |
|---------------|--|
| Other hazards | Risk of soil and ground water contamination. |
|---------------|--|

SECTION 3: Composition/information on ingredients

3.2. Mixtures

NESTE TURBO+ LSA 10W-40

| | | | |
|--|----------------------|--|--------------------------|
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | | | 5 - < 10 % |
| CAS number: 72623-87-1 | EC number: 276-738-4 | REACH registration number: 01-2119474889-13-XXXX | |
| Classification Asp. Tox. 1 - H304 | | | |
| Distillates (petroleum), hydrotreated heavy paraffinic | | | 5 - < 10 % |
| CAS number: 64742-54-7 | EC number: 265-157-1 | REACH registration number: 01-2119484627-25-XXXX | |
| Classification Asp. Tox. 1 - H304 | | | |
| Mineral Oil | | | 1 - < 2,5 % * |
| CAS number: — | | | |
| Classification Asp. Tox. 1 - H304 | | | |
| Zinc O,O',O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) | | | 0,5 - < 1 % |
| CAS number: 2215-35-2 | EC number: 218-679-9 | REACH registration number: 01-2119953275-34-XXXX | |
| Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Chronic 2 - H411 | | | |
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts | | | 0,1 - < 0,25 % |
| CAS number: 84605-29-8 | EC number: 283-392-8 | REACH registration number: 01-2119493626-26-XXXX | |
| Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Chronic 2 - H411 | | | |

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

Ingredient notes

*Possible numbers:

01-2119484627-25-xxxx

01-2119471299-27-xxxx

01-2119487077-29-xxxx

01-2119480132-48-xxxx

SECTION 4: First aid measures

NESTE TURBO+ LSA 10W-40

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

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). |
|----------------------------------|---|

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. |
|--------------------------------|--|

6.4. Reference to other sections

| | |
|------------------------------------|---|
| Reference to other sections | For personal protection, see Section 8. |
|------------------------------------|---|

NESTE TURBO+ LSA 10W-40

SECTION 7: Handling and storage

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

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (CAS: 72623-87-1)

DNEL Workers - Inhalation; Long term local effects: 5,4 mg/m³, (8h), Aerosol
 Consumer - Inhalation; Long term local effects: 1,2 mg/m³, (24h), Aerosol
 Available hazard data do not enable the derivation of a DNEL for dermal irritant effects.
 Available hazard data do not support the need for a DNEL to be established for other health effects.

8.2. Exposure controls

Appropriate engineering controls All handling should only take place in well-ventilated areas. 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 No specific recommendations.

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 Tan.

Odour Petroleum.

Odour threshold -

pH -

Melting point < -36°C Pour point

Flash point 238°C Cleveland open cup.

NESTE TURBO+ LSA 10W-40

| | |
|---|--|
| Flammability (solid, gas) | - |
| Upper/lower flammability or explosive limits | - |
| Vapour pressure | - |
| Vapour density | - |
| Relative density | 0,860 @ 15°C |
| Solubility(ies) | Insoluble in water. |
| Partition coefficient | - |
| Auto-ignition temperature | - |
| Decomposition Temperature | - |
| Viscosity | Dynamic viscosity ~6800 mPa s @ -25°C Kinematic viscosity 94 mm ² /s @ 40°C |
| Explosive properties | - |
| Oxidising properties | - |
| <u>9.2. Other information</u> | |
| 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

Materials to avoid Oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrocarbons.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects Based on available data the classification criteria are not met.

Skin corrosion/irritation

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

Serious eye damage/irritation

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

NESTE TURBO+ LSA 10W-40

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 Based on available data the classification criteria are not met.

Toxicological information on ingredients.

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 5000 mg/kg, Oral, Rat (OECD 401)

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rabbit (OECD 402)

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ > 5,53 mg/l, Inhalation, Rat (OECD 403)

Distillates (petroleum), hydrotreated heavy paraffinic

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 15000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 5000 mg/kg, Dermal, Rabbit

Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate)

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 2230 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 3160 mg/kg, Dermal, Rabbit (OECD TG 402)

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ > 2,3 mg/l, Inhalation, Rat (4h)

NESTE TURBO+ LSA 10W-40**Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts****Acute toxicity - oral**Notes (oral LD₅₀) LD₅₀ 3100 mg/kg, Oral, Rat**Acute toxicity - dermal**Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rat**Acute toxicity - inhalation**Notes (inhalation LC₅₀) LC₅₀ (4h) > 2,3 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.

Ecological information on ingredients.**Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based****Acute aquatic toxicity**

Acute toxicity - fish LL₅₀, 96 hours: > 100 mg/l, Pimephales promelas (Fat-head Minnow)
NOEL, 96 hours: ≥ 100 mg/l,
WAF (OECD 203)

Acute toxicity - aquatic invertebrates EL50, 48 hours: > 10000 mg/l, Daphnia magna
NOEL, 48 - 96 hours: ≥ 10000 mg/l,
LL₅₀, 24 - 96 hours: > 10000 mg/l,
WAF (OECD 202)

Acute toxicity - aquatic plants NOEL, 72 hours: ≥ 100 mg/l, Pseudokirchneriella subcapitata
WAF (OECD 201)

Acute toxicity - microorganisms NOEL, 10 minutes: > 1,93 mg/l, Micro-organisms (wastewater sludge)
(DIN 38412, DIN38409)

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOELR, 14 days: ≥ 1000 mg/l, Oncorhynchus mykiss (Rainbow trout)

Chronic toxicity - aquatic invertebrates NOEL, 21 days: 10 mg/l, Daphnia magna
WAF (OECD 211)

Distillates (petroleum), hydrotreated heavy paraffinic**Acute aquatic toxicity**

Acute toxicity - fish LL₅₀, 96 hours: > 100 mg/l,

Acute toxicity - aquatic invertebrates EL50, 48 hours: > 10000 mg/l,

Acute toxicity - aquatic plants EL50, 72 hours: > 100 mg/l,

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, : 10 mg/l,

NESTE TURBO+ LSA 10W-40

Chronic toxicity - aquatic invertebrates NOEC, : 10 mg/l,

Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate)**Acute aquatic toxicity**

Acute toxicity - fish LC₅₀, 96 hours: 46 mg/l, Cyprinodon variegatus (Sheepshead minnow)
LL50, 96 hours: 4,5 mg/l, Oncorhynchus mykiss (Rainbow trout)
(OECD TG 203)

Acute toxicity - aquatic invertebrates EL50, 48 hours: 23 mg/l, Daphnia magna
(OECD TG 202)

Acute toxicity - aquatic plants NOEL, 72 hours: 10 mg/l, Desmodium subspicatus
WAF (OECD TG 201)

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 0,4 mg/l, Daphnia magna
WAF (OECD TG 211)

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts**Acute aquatic toxicity**

Acute toxicity - fish LL₅₀, 96 hours: 4,5 mg/l, Oncorhynchus mykiss (Rainbow trout)
WAF (OECD TG 203)

Acute toxicity - aquatic invertebrates EL50, 48 hours: 23 mg/l, Daphnia magna
WAF (OECD TG 202)

Acute toxicity - aquatic plants EL50, 72 hours: 24 mg/l, Desmodium subspicatus
WAF (OECD TG 201)

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 28 days: 0,4 mg/l, Daphnia magna
WAF (OECD TG 211)

12.2. Persistence and degradability

Persistence and degradability No data available.

Biodegradation No data available.

Ecological information on ingredients.**Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate)**

Biodegradation 1,5 %, 28 d (OECD TG 301 B)

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts

Biodegradation 1,5 %, 28 d (OECD TG 301 B)

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient -

Ecological information on ingredients.**Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts**

NESTE TURBO+ LSA 10W-40

Partition coefficient log Pow: 0,56

12.4. Mobility in soil

Mobility No data available.

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 Risk of soil and ground water contamination.

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

-

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

NESTE TURBO+ LSA 10W-40

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

Key literature references and sources for data

The manufacturer's SDS. 26.2.2018

Revision comments

This is the first issue.

Revision date

27/06/2019

SDS number

6329

Hazard statements in full

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.