

SAFETY DATA SHEET NESTE TURBO+ NEX 10W-40

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

1.1. Product identifier

Product name NESTE TURBO+ NEX 10W-40

Product number ID 19112

Internal identification 1869

Synonyms; trade names Previous product name: NESTE TURBO NEX 10W-40, product number 1121, ID 17274.

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 +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 EUH208 Contains Molybdenum polysulphide long chain alkyl dithiocarbamate complex. May

produce an allergic reaction.

Supplemental label

information

EUH210 Safety data sheet available on request.

2.3. Other hazards

Other hazards This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

NESTE TURBO+ NEX 10W-40

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

25 - < 40 %

based

EC number: 276-738-4

REACH registration number: 01-

2119474889-13-XXXX

Classification

Asp. Tox. 1 - H304

Distillates (petroleum), hydrotreated light paraffinic

2,5 - < 5 %

CAS number: 64742-55-8

EC number: 265-158-7

REACH registration number: 01-

2119487077-29-XXXX

Classification

Asp. Tox. 1 - H304

Distillates (petroleum), hydrotreated heavy paraffinic

2,5 - < 5 %

CAS number: 64742-54-7

EC number: 265-157-1

REACH registration number: 01-

2119484627-25-XXXX

Classification

Asp. Tox. 1 - H304

Reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-

2,5 - < 5 %

hydroxyphenyl)propionate

CAS number: 125643-61-0

EC number: 406-040-9

REACH registration number: 01-

0000015551-76-XXXX

Classification

Aquatic Chronic 4 - H413

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-

2,5 - < 5 %

pased

CAS number: 72623-86-0

EC number: 276-737-9

REACH registration number: 01-

2119474878-16-XXXX

Classification

Asp. Tox. 1 - H304

bis(nonylphenyl)amine

1 - < 2,5 %

CAS number: 36878-20-3

EC number: 253-249-4

REACH registration number: 01-

2119488911-28-XXXX

Classification

Aquatic Chronic 4 - H413

NESTE TURBO+ NEX 10W-40

zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)]

1 - < 2,5 % *

bis(dithiophosphate)

CAS number: 93819-94-4 EC number: 298-577-9

REACH registration number: 01-

2119543726-33-XXXX

Classification

Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Chronic 2 - H411

Molybdenum polysulphide long chain alkyl dithiocarbamate

0,1 - < 0,25 %

complex

CAS number: — EC number: 457-320-2

REACH registration number: 01-

0000019337-66-XXXX

Classification

Skin Irrit. 2 - H315 Skin Sens. 1B - H317 Aquatic Chronic 3 - H412

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

Ingredient notes Special concentration limit * CAS: 93819-94-4 Skin Irrit. 2 - H315; 6,25 - 100 % Eye Dam. 1

- H318; > 12,5 - 100 %, Eye Irrit. 2 - H319; > 10 - 12,5 %

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 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 The product contains a small amount of sensitising substance. May cause an allergic skin

reaction.

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

Do not use water jet as an extinguisher, as this will spread the fire.

media

5.2. Special hazards arising from the substance or mixture

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Specific hazards Collect contaminated fire extinguishing water separately. This must not be discharged into

drains.

Hazardous combustion

products

Carbon dioxide (CO2). Carbon monoxide (CO). Hydrocarbons. Oxides of phosphorus. Mercaptans. Hydrogen sulphide (H2S). Sulphurous gases (SOx). Zinc oxide fumes. Nitrous

gases (NOx).

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.

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), C15-30, hydrotreated neutral oil-based (CAS: 72623-86-0)

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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.

zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (CAS: 93819-94-4)

DNEL Workers - Inhalation; Long term systemic effects: 8,31 mg/m³

Workers - Dermal; Long term systemic effects: 0,58 mg/kg Consumer - Inhalation; Long term systemic effects: 2,11 mg/m³ Consumer - Dermal; Long term systemic effects: 0,29 mg/kg Consumer - Oral; Long term systemic effects: 0,24 mg/kg

Molybdenum polysulphide long chain alkyl dithiocarbamate complex

Ingredient comments TWA: 10 mg/m³ Supplier's information.

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 < -39°C Pour point

Initial boiling point and range -

Flash point 206°C Cleveland open cup.

Flammability (solid, gas)

Upper/lower flammability or

explosive limits

Vapour pressure -

NESTE TURBO+ NEX 10W-40

Vapour density -

Relative density ~ 0,864 @ 15°C

Solubility(ies) Insoluble in water.

Partition coefficient

Auto-ignition temperature -

Decomposition Temperature -

Viscosity Kinematic viscosity ~ 103 mm2/s @ 40°C Dynamic viscosity < 7.000 mPa s @ -25°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 heat.

10.5. Incompatible materials

Materials to avoid Oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition

ו

No known hazardous decomposition products.

products

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/irritationBased 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.

Respiratory sensitisation

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

Skin sensitisation

Skin sensitisation The product contains a small amount of sensitising substance. May cause an allergic skin

reaction. Based on available data the classification criteria are not met.

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Germ cell mutagenicity

Genotoxicity - in vivoBased 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 -

Based on available data the classification criteria are not met.

development

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

Acute toxicity oral (LD₅₀ 5,000.0

mg/kg)

Species Rat

ATE oral (mg/kg) 5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 20,000.0

mg/kg)

Species Rabbit

ATE dermal (mg/kg) 20,000.0

Acute toxicity - inhalation

Acute toxicity inhalation

(LC₅₀ dust/mist mg/l)

Species Rat

ATE inhalation 553.0

(dusts/mists mg/l)

Distillates (petroleum), hydrotreated light paraffinic

Acute toxicity - oral

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

Acute toxicity - dermal

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

553.0

Distillates (petroleum), hydrotreated heavy paraffinic

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Acute toxicity - oral

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

Acute toxicity - dermal

Notes (dermal LD₅o) LD₅o > 5000 mg/kg, Dermal, Rabbit

Reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 2000 mg/kg, Oral, Rat (OECD TG 401)

Acute toxicity - dermal

Notes (dermal LD₅o) LD₅o > 2000 mg/kg, Dermal, Rat (OECD TG 402)

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 5 mg/kg, Oral, Rat, Male, Female (OECD TG 407)

Lubricating oils (petroleum), C15-30, 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 (4h) (OECD 403)

bis(nonylphenyl)amine

Acute toxicity - oral

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

Acute toxicity - dermal

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

zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 2600 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅o) LD₅o > 3160 mg/kg, Dermal, Rabbit (OECD TG 402)

Molybdenum polysulphide long chain alkyl dithiocarbamate complex

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 2000 mg/kg, Oral, Rat

Acute toxicity - dermal

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

SECTION 12: Ecological information

12.1. Toxicity

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Based on available data the classification criteria are not met. **Toxicity**

Ecological information on ingredients.

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 NOEC, : 10 mg/l,

life stage

invertebrates

Chronic toxicity - aquatic

NOEC,: 10 mg/l,

Reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: > 100 mg/l, Brachydanio rerio (Zebra Fish)

(OECD TG 203)

Acute toxicity - aquatic

EC₅₀, 48 hours: > 100 mg/l, Daphnia magna

invertebrates

WAF (OECD TG 202)

Acute toxicity - aquatic

EC₅₀, 72 hours: > 3 mg/l, Desmodesmus subspicatus (OECD TG 201)

plants

NOEC, 72 hours: ≥ 3 mg/l, Desmodesmus subspicatus

(OECD TG 201)

Acute toxicity -EC₅o, 3 hours: > 100 mg/l, Activated sludge

(OECD TG 209) microorganisms

Chronic aquatic toxicity

Chronic toxicity - fish early NOEC, 36 days: 0,001 mg/l, Brachydanio rerio (Zebra Fish)

life stage WAF (OECD TG 210)

Chronic toxicity - aquatic NOEC, 21 days: ~ 0,01 mg/l, Daphnia magna

invertebrates (OECD TG 211)

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based

Acute aquatic toxicity

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

NOEL, 96 hours: ≥ 100 mg/l,

WAF (OECD 203)

Acute toxicity - aquatic

EL50, 24 - 48 hours: > 10000 mg/l, invertebrates

NOEL, 48 - 96 hours: ≥ 10000 mg/l, LL₅₀, 24 - 96 hours: > 10000 mg/l,

WAF (OECD 202)

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Acute toxicity - aquatic

NOEL, 72 hours: ≥ 100 mg/l,

plants

WAF (OECD 201)

Acute toxicity -

NOEL, 10 minutes: > 1,93 mg/l, Micro-organisms (wastewater sludge)

microorganisms

(DIN 38412, DIN38409)

Chronic aquatic toxicity

Chronic toxicity - aquatic

NOEL, 21 days: 10 mg/l, Daphnia magna

invertebrates

WAF (OECD 211)

bis(nonylphenyl)amine

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: > 100 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic

EC₅₀, 48 hours: > 100 mg/l, Daphnia magna

invertebrates

WAF

Acute toxicity - aquatic

plants

EC₅₀, 72 hours: 600 mg/l, Pseudokirchneriella subcapitata

zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)

Acute aquatic toxicity

Acute toxicity - fish LL₅o, 96 hours: 4,5 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic

invertebrates

EC₅o, 48 hours: 5,4 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

EC₅o, 72 hours: 2,1 mg/l, Selenastrum capricornutum

Molybdenum polysulphide long chain alkyl dithiocarbamate complex

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 94,8 mg/l, Oncorhynchus mykiss (Rainbow trout)

WAF (OECD TG 203)

Acute toxicity - aquatic

EL50, 48 hours: 50 mg/l, Daphnia magna

invertebrates

WAF (OECD TG 202)

Acute toxicity - aquatic

NOELR, 72 hours: 4,05 mg/l, Pseudokirchneriella subcapitata

plants

WAF (OECD TG 201)

Chronic aquatic toxicity

Chronic toxicity - aquatic NOELR, 21 days: 100 mg/l, Daphnia magna

invertebrates WAF (OECD TG 211)

12.2. Persistence and degradability

Persistence and degradability No data available.

Biodegradation No data available.

Ecological information on ingredients.

Reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate

Biodegradation < 4 %, 28 d (OECD TG 301B)

NESTE TURBO+ NEX 10W-40

bis(nonylphenyl)amine

Biodegradation 0 %, 28 d

(OECD TG 301 B)

zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)

Biodegradation 1,5 %, 28 d

(OECD TG 301 B)

Molybdenum polysulphide long chain alkyl dithiocarbamate complex

Biodegradation 23 %, 28 d (OECD TG 301B)

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient -

Ecological information on ingredients.

Reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate

Bioaccumulative potential BCF: 260, Fish (OECD TG 305)

Partition coefficient log Pow: 9,2 (calculated)

bis(nonylphenyl)amine

Partition coefficient log Pow: > 7,5

zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)

Partition coefficient log Pow 0,59 - 1,2 @ 23°C

Molybdenum polysulphide long chain alkyl dithiocarbamate complex

Partition coefficient log Pow : > 5,1 (OECD TG 107)

12.4. Mobility in soil

Mobility No data available.

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 No data available.

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

NESTE TURBO+ NEX 10W-40

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 Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

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

WAF = Water Accommodated Fraction

Key literature references and

sources for data

The manufacturer's SDS. 21.11.2019

Revision comments Revised formulation. NOTE: Lines within the margin indicate significant changes from the

previous revision.

Revision date 12/12/2019

NESTE TURBO+ NEX 10W-40

Supersedes date 22/10/2019

SDS number 4690

Hazard statements in full H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

EUH208 Contains Molybdenum polysulphide long chain alkyl dithiocarbamate complex. May

produce an allergic reaction.