



SAFETY DATA SHEET NESTE PRO+ F 5W-20

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

1.1. Product identifier

Product name	NESTE PRO+ F 5W-20
Product number	ID 19059
Internal identification	1176
Synonyms; trade names	Previous product name: NESTE CITY PRO F 5W-20, product number 0132, ID 17556.

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

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 C14-16-18 Alkyl phenol, 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

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Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	70 - < 80 %
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CAS number: 72623-87-1

EC number: 276-738-4

REACH registration number: 01-2119474889-13-XXXX

Classification

Asp. Tox. 1 - H304

C14-16-18 Alkyl phenol	< 1 %
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CAS number: —

EC number: 931-468-2

REACH registration number: 01-2119498288-19-XXXX

Classification

Skin Sens. 1B - H317

STOT RE 2 - H373

Molybdenum polysulphide long chain alkyl dithiocarbamate complex	0,1 - < 0,25 %
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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.

SECTION 4: First aid measures**4.1. Description of first aid measures**

General information	Remove affected person from source of contamination. Show this Safety Data Sheet to the medical personnel. Keep affected person under observation.
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.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

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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 monoxide (CO). Carbon dioxide (CO₂). Hydrocarbons. Nitrous gases (NO_x).

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 or watercourses or onto the ground.

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. Empty containers or liners may retain some product residues and hence be potentially hazardous. Avoid contamination of ponds or watercourses with washing down water. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. 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.

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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/m ³ , (8h), Aerosol Consumer - Inhalation; Long term local effects: 1,2 mg/m ³ , (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.
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Molybdenum polysulphide long chain alkyl dithiocarbamate complex

Ingredient comments	TWA: 10 mg/m ³ Supplier's information.
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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	-
Odour threshold	-
pH	-
Melting point	< -39°C Pour point
Initial boiling point and range	-
Flash point	220°C Cleveland open cup.
Flammability (solid, gas)	-
Upper/lower flammability or explosive limits	-
Vapour pressure	-
Vapour density	-
Relative density	~ 0,853 @ 15°C

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Solubility(ies)	Insoluble in water.
Partition coefficient	-
Auto-ignition temperature	-
Decomposition Temperature	-
Viscosity	Kinematic viscosity ~45,1 mm ² /s @ 40°C
Explosive properties	-
Oxidising properties	-

9.2. Other information

Other information	Not known.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No potentially hazardous reactions known.
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10.4. Conditions to avoid

Conditions to avoid	Avoid exposure to high temperatures or direct sunlight.
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10.5. Incompatible materials

Materials to avoid	Oxidising agents.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Carbon monoxide (CO). Carbon dioxide (CO ₂). Hydrocarbons. Nitrous gases (NO _x).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

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

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

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

Skin sensitisation	The product contains a small amount of sensitising substance. Based on available data the classification criteria are not met.
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Germ cell mutagenicity

Genotoxicity - in vivo	Based on available data the classification criteria are not met.
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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)

C14-16-18 Alkyl phenol

Acute toxicity - oral

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

Acute toxicity - dermal

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

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

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

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Acute toxicity - fish	LL ₅₀ , 96 hours: > 100 mg/l, Pimephales promelas (Fat-head Minnow) NOEL, 96 hours: ≥ 100 mg/l, WAF (OECD 203)
Acute toxicity - aquatic invertebrates	EL ₅₀ , 48 hours: > 10000 mg/l, Daphnia magna NOEL, 48 - 96 hours: ≥ 10000 mg/l, LL ₅₀ , 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)
<u>Chronic aquatic toxicity</u>	
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)

C14-16-18 Alkyl phenol**Acute aquatic toxicity**

Acute toxicity - fish	LC ₅₀ , 96 hours: > 100 mg/l, Cyprinus carpio (Common carp) WAF
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: > 100 mg/l, Daphnia magna (OECD TG 202)
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: > 100 mg/l, Pseudokirchneriella subcapitata WAF

Molybdenum polysulphide long chain alkyl dithiocarbamate complex**Acute aquatic toxicity**

Acute toxicity - fish	LC ₅₀ , 96 hours: 94,8 mg/l, Oncorhynchus mykiss (Rainbow trout) WAF (OECD TG 203)
Acute toxicity - aquatic invertebrates	EL ₅₀ , 48 hours: 50 mg/l, Daphnia magna WAF (OECD TG 202)
Acute toxicity - aquatic plants	NOELR, 72 hours: 4,05 mg/l, Pseudokirchneriella subcapitata WAF (OECD TG 201)
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - aquatic invertebrates	NOELR, 21 days: 100 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.**Molybdenum polysulphide long chain alkyl dithiocarbamate complex**

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

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient -

Ecological information on ingredients.

C14-16-18 Alkyl phenol

Partition coefficient log Pow: > 7,2

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. Do not discharge into drains or watercourses or onto the ground. 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

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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

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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. 3.9.2019

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

Revision date 02/03/2020

Supersedes date 20/09/2019

SDS number 4764

Hazard statements in full H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.
EUH208 Contains C14-16-18 Alkyl phenol, Molybdenum polysulphide long chain alkyl dithiocarbamate complex. May produce an allergic reaction.