



SAFETY DATA SHEET

NESTE TURBO+ FA-4 5W-30

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

1.1. Product identifier

Product name	NESTE TURBO+ FA-4 5W-30
Product number	ID 20300
Internal identification	1877

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

Identified uses	Engine oil.
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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
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1.4. Emergency telephone number

National emergency telephone number	+358 800 147 111, +358 9 471 977, Poison Information Centre
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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 2,5-Furandione, polymer with 1-hexadecene, methyloxirane polymer with oxirane bis (2-aminopropyl) ether and 2-methyl-1-propene, 4-(phenylamino)phenyl imide, Kookosöljy, reaktiutuotteet boorihapon (H3BO3), dietanoliamiinin ja glyserolin kanssa, Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts, Benzenesulfonic acid methyl-, mono C20-26 branched alkyl derivs., calcium salts. May produce an allergic reaction.
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Supplemental label information	EUH210 Safety data sheet available on request.
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2.3. Other hazards

Other hazards	This product does not contain any substances classified as PBT or vPvB.
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SECTION 3: Composition/information on ingredients

3.2. Mixtures

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Amines, polyethylenepoly-, reaction products with succinic anhydride polyisobutenyl derivs., borated	2,5 - < 5,0 %
CAS number: 134758-95-5 EC number: 603-861-6	
Classification Aquatic Chronic 4 - H413	
Reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate	2,5 - < 5,0 %
CAS number: 125643-61-0 EC number: 406-040-9 REACH registration number: 01-0000015551-76-XXXX	
Classification Aquatic Chronic 4 - H413	
Benzenesulfonic acid methyl-, mono C20-26 branched alkyl derivs., calcium salt	1 - < 2,5 %
CAS number: 722503-69-7	
Classification Aquatic Chronic 4 - H413	
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	1 - < 2,5 %
CAS number: 72623-87-1 EC number: 276-738-4 REACH registration number: 01-2119474889-13	
Classification Asp. Tox. 1 - H304	
Amines, polyethylenepoly-, reaction products with 1,3-dioxolan-2-one and succinic anhydride monopolyisobutenyl derivs	1 - < 2,5 %
CAS number: 147880-09-9 EC number: 604-611-9	
Classification Aquatic Chronic 4 - H413	
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	

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Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS number: 68784-31-6 EC number: 272-238-5	1 - < 2,5 %
Classification Eye Dam. 1 - H318 Aquatic Chronic 2 - H411	
Benzenesulfonic acid methyl-, mono C20-26 branched alkyl derivs., calcium salts CAS number: 722503-69-7	0,1 - < 0,25 %
Classification Skin Sens. 1 - H317 Aquatic Chronic 4 - H413	
Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts CAS number: 722503-68-6	0,1 - < 0,25 %
Classification Skin Sens. 1B - H317 Aquatic Chronic 4 - H413	
Kookosöljy, reaktiotuotteet boorihapon (H3BO3), dietanoliamiinin ja glyserolin kanssa CAS number: 1428353-74-5 EC number: 806-731-9 REACH registration number: 01-2120067755-46-XXXX	1 - < 2,5 %
Classification Eye Irrit. 2 - H319 Skin Sens. 1B - H317 Aquatic Chronic 2 - H411	
2,5-Furandione, polymer with 1-hexadecene, methyloxirane polymer with oxirane bis (2-aminopropyl) ether and 2-methyl-1-propene, 4-(phenylamino)phenyl imide CAS number: 873694-48-5	1 - < 2,5 %
Classification Skin Sens. 1B - H317 Aquatic Chronic 4 - H413	

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

Inhalation Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms are severe or persist.

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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

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). Nitrous gases (NO _x). Oxides of the following substances: Zinc. Boron.

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.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

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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

Amines, polyethylenepoly-, reaction products with succinic anhydride polyisobutenyl derivs., borated

Borates: 0,5 mg/m³ (8h) HTP 2018/FIN.

Reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (CAS: 125643-61-0)

PNEC

- STP; 1 mg/l
- STP; 10 mg/l
- Sediment (Freshwater); 60,9 mg/kg
- Sediment (Marinewater); 0,037 mg/kg
- Sediment (Freshwater); 0,37 mg/kg
- Sediment (Freshwater); 233 mg/kg
- Sediment (Marinewater); 0,609 mg/kg
- Sediment (Marinewater); 23,3 mg/kg
- Soil; 0,05 mg/kg
- Soil; 3,16 mg/kg
- Soil; 189 mg/kg
- Soil; 1 mg/kg

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.

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts (CAS: 68784-31-6)

DNEL

- Workers - Inhalation; Long term systemic effects: 2,93 mg/m³
- Workers - Inhalation; Short term systemic effects: 496,4 mg/m³
- Workers - Dermal; Long term systemic effects: 10,42 mg/kg
- Workers - Dermal; Short term systemic effects: 100 mg/kg
- Consumer - Inhalation; Long term systemic effects: 11,75 mg/m³
- Consumer - Inhalation; Short term systemic effects: 198,6 mg/m³
- Consumer - Dermal; Long term systemic effects: 2,1 mg/kg
- Consumer - Dermal; Short term systemic effects: 50 mg/kg
- Consumer - Oral; Long term systemic effects: 0,21 mg/kg

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PNEC	Sediment (Freshwater); 0,0701 mg/kg Sediment (Marinewater); 0,00701 mg/kg Soil; 0,0548 mg/kg STP; 3,8 mg/l
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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	-
Odour	-
Odour threshold	-
pH	-
Melting point	-
Initial boiling point and range	-
Flash point	226°C Cleveland open cup.
Flammability (solid, gas)	-
Upper/lower flammability or explosive limits	-
Vapour pressure	-
Vapour density	-
Relative density	0,859 g/cm ³
Solubility(ies)	-
Partition coefficient	-
Auto-ignition temperature	-
Decomposition Temperature	-
Viscosity	Kinematic viscosity 58 mm ² /s @ 40°C
Explosive properties	-
Oxidising properties	-

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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

Materials to avoid Strong acids. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products No known hazardous decomposition 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/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. Supplier's information.

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. Supplier's information.

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.

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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.

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 LD₅₀) LD₅₀ > 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), 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)

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

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

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 2900 mg/kg, Oral, Rat, Female (OECD TG 401) LD₅₀ 3400 mg/kg, Oral, Rat, Male (OECD TG 401)

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 5000 mg/kg, Dermal, Rabbit (OECD TG 402)

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 125 mg/kg, Oral, Rat, Male, Female (28 d)

Kookosöljy, reaktiotuotteet boorihapon (H3BO3), dietanoliiniin ja glyserolin kanssa

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 200 mg/kg, Oral, Rat (OECD TG 423)

Acute toxicity - dermal

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

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. Supplier's information.

Ecological information on ingredients.

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 invertebrates EC₅₀, 48 hours: > 100 mg/l, Daphnia magna
WAF (OECD TG 202)

Acute toxicity - aquatic plants EC₅₀, 72 hours: > 3 mg/l, Desmodesmus subspicatus
(OECD TG 201)
NOEC, 72 hours: ≥ 3 mg/l, Desmodesmus subspicatus
(OECD TG 201)

Acute toxicity - microorganisms EC₅₀, 3 hours: > 100 mg/l, Activated sludge
(OECD TG 209)

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 36 days: 0,001 mg/l, Brachydanio rerio (Zebra Fish)
WAF (OECD TG 210)

Chronic toxicity - aquatic invertebrates NOEC, 21 days: ~ 0,01 mg/l, Daphnia magna
(OECD TG 211)

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)

NESTE TURBO+ FA-4 5W-30bis(nonylphenyl)amineAcute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: > 100 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: > 100 mg/l, Daphnia magna WAF
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 600 mg/l, Pseudokirchneriella subcapitata

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc saltsAcute aquatic toxicity

Acute toxicity - fish	LL50, 96 hours: 4,4 mg/l, Oncorhynchus mykiss (Rainbow trout) (OECD TG 203)
Acute toxicity - aquatic invertebrates	EL50, 48 hours: 75 mg/l, Daphnia magna (OECD TG 202) WAF
Acute toxicity - aquatic plants	EL50, 72 hours: 410 mg/l, Desmodemus subspicatus (OECD TG 201)

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)bis(nonylphenyl)amine**Biodegradation** 0 %, 28 d
(OECD TG 301 B)Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts**Biodegradation** < 5 %, 27 d (OECD TG 301D)**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

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Partition coefficient log Pow: > 7,5

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

Partition coefficient log Pow: 4

Kookosöljy, reaktiotuotteet boorihapon (H3BO3), dietanoliiniin ja glyserolin kanssa

Partition coefficient Pow: 3,57 @ 25 °C

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

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

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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

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.

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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

Key literature references and sources for data

The manufacturer's SDS. 16.12.2019

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

04/11/2020

Supersedes date

24/09/2019

SDS number

6372

Hazard statements in full

H304 May be fatal if swallowed and enters airways.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.
EUH208 Contains 2,5-Furandione, polymer with 1-hexadecene, methyloxirane polymer with oxirane bis (2-aminopropyl) ether and 2-methyl-1-propene, 4-(phenylamino)phenyl imide, Kookosöljy, reaktiotuotteet boorihapon (H3BO3), dietanoliamiinin ja glyserolin kanssa, Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts, Benzenesulfonic acid methyl-, mono C20-26 branched alkyl derivs., calcium salts. May produce an allergic reaction.