# **NESTE OIL**

### SAFETY DATA SHEET NESTE CITY STANDARD 10W-40

SECTION 1: Identification of th	SECTION 1: Identification of the substance/mixture and of the company/undertaking	
1.1. Product identifier		
Product name	NESTE CITY STANDARD 10W-40	
Product number	ID 10708	
Internal identification	0442	
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	ne safety data sheet	
Supplier	Neste Markkinointi Oy Keilaranta 21, Espoo, P.O.B. 95, 00095 NESTE OIL, FINLAND Tel. +358 10 45811 Fax +358 10 45 84442 lubetec@nesteoil.com	
1.4. Emergency telephone nun	nber	
National emergency telephone number	+358-9-471 977, +358-9-4711, Poison Information Centre/HUS, P.O.B 340 (Tukholmankatu 17) 00029 HUS (Helsinki, Finland)	
SECTION 2: Hazards identifica	tion	
2.1. Classification of the substa	ance or mixture	
Classification Physical hazards	Not Classified	
Health hazards	Eye Irrit. 2 - H319	
Environmental hazards	Not Classified	
2.2. Label elements		
Pictogram		
Signal word	Warning	
Hazard statements	H319 Causes serious eye irritation. EUH208 Contains Molybdenum polysulphide long chain alkyl dithiocarbamide complex. May produce an allergic reaction.	
Precautionary statements	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention. P102 Keep out of reach of children. P280 Wear eye and face protection.	

#### 2.3. Other hazards

SECTION 3: Composition/informat	ion on ingredients	
3.2. Mixtures		
Lubricating oils (petroleum), C20- based	50, hydrotreated neutral oil-	10 - < 15 %
CAS number: 72623-87-1	EC number: 276-738-4	REACH registration number: 01- 2119474889-13-XXXX
Classification Asp. Tox. 1 - H304		
Distillates (petroleum), hydrotreat	ed light paraffinic	5 - < 10 %
CAS number: 64742-55-8	EC number: 265-158-7	REACH registration number: 01- 2119487077-29-XXXX
<b>Classification</b> 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
<b>Classification</b> Aquatic Chronic 4 - H413		
zinc bis[O-(6-methylheptyl)] bis[O bis(dithiophosphate)	-(sec-butyl)]	1 - < 2,5%
CAS number: 93819-94-4	EC number: 298-577-9	REACH registration number: 01- 2119543726-33-XXXX
<b>Classification</b> Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Chronic 2 - H411		
Molybdenum polysulphide long ch complex	nain alkyl dithiocarbamide	0,1 - < 0,25 %
CAS number: —	EC number: 457-320-2	
<b>Classification</b> Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412		
The Full Text for all R-Phrases and	Hazard Statements are Displayed in Se	ection 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.		
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. 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. Continue to rinse for at least 15 minutes and get medical attention.		
4.2. Most important symptoms	and effects, both acute and delayed		
General information	Causes serious eye irritation. Vapours/aerosol spray may irritate the respiratory system. The product contains a small amount of sensitising substance.		
4.3. Indication of any immedia	te medical attention and special treatment needed		
Notes for the doctor	Treat symptomatically.		
SECTION 5: Firefighting meas	sures		
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 fr	om the substance or mixture		
Specific hazards	Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.		
Hazardous combustion products	Carbon dioxide (CO2). Carbon monoxide (CO). Hydrocarbons. Nitrous gases (NOx). Zinc oxide fumes. Sulphurous gases (SOx). Hydrogen sulphide (H2S). Mercaptans.		
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	se measures		
6.1. Personal precautions, pro	tective 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 precaution	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 section	ns		

3/9

**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 stor	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/m <sup>3</sup> , (8h), Aerosol Consumer - Inhalation; Long term local effects: 1,2 mg/m <sup>3</sup> , (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	d Chemical Properties
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### 9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Tan.
Odour	Petroleum.
Odour threshold	-
рН	-

Melting point	< -33°C Pour point
Initial boiling point and range	-
Flash point	200°C PMCC (Pensky-Martens closed cup).
Flammability (solid, gas)	-
Upper/lower flammability or explosive limits	-
Vapour pressure	-
Vapour density	-
Relative density	0,867 @ 15°C
Solubility(ies)	Insoluble in water.
Partition coefficient	-
Auto-ignition temperature	-
Decomposition Temperature	-
Viscosity	~ 94 mm2/s @ 40°C ; ~ 14 mm2/s @ 100°C
Explosive properties	-
Oxidising properties	-
Oxidialing properties	
9.2. Other information	
	Not known.
9.2. Other information	
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9.2. Other information Other information SECTION 10: Stability and rea	
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9.2. Other information Other information SECTION 10: Stability and rea 10.1. Reactivity Reactivity	activity
9.2. Other information         Other information         SECTION 10: Stability and read         10.1. Reactivity         Reactivity         10.2. Chemical stability	There are no known reactivity hazards associated with this product. Stable at normal ambient temperatures and when used as recommended.
9.2. Other information Other information SECTION 10: Stability and rea 10.1. Reactivity Reactivity 10.2. Chemical stability Stability	There are no known reactivity hazards associated with this product. Stable at normal ambient temperatures and when used as recommended.
9.2. Other informationOther informationSECTION 10: Stability and read10.1. ReactivityReactivity10.2. Chemical stabilityStability10.3. Possibility of hazardousPossibility of hazardous	Activity There are no known reactivity hazards associated with this product. Stable at normal ambient temperatures and when used as recommended. reactions
9.2. Other information         Other information         SECTION 10: Stability and read         10.1. Reactivity         Reactivity         10.2. Chemical stability         Stability         10.3. Possibility of hazardous         Possibility of hazardous         reactions         10.4. Conditions to avoid         Conditions to avoid	Activity There are no known reactivity hazards associated with this product. Stable at normal ambient temperatures and when used as recommended.  Feactions No potentially hazardous reactions known.
9.2. Other information         Other information         SECTION 10: Stability and read         10.1. Reactivity         Reactivity         10.2. Chemical stability         Stability         10.3. Possibility of hazardous         Possibility of hazardous         reactions         10.4. Conditions to avoid	Activity There are no known reactivity hazards associated with this product. Stable at normal ambient temperatures and when used as recommended.  Feactions No potentially hazardous reactions known.
9.2. Other informationOther informationSECTION 10: Stability and read10.1. ReactivityReactivity10.2. Chemical stabilityStability10.3. Possibility of hazardousPossibility of hazardousreactions10.4. Conditions to avoidConditions to avoid10.5. Incompatible materials	activity There are no known reactivity hazards associated with this product. Stable at normal ambient temperatures and when used as recommended. reactions No potentially hazardous reactions known. Avoid exposure to high temperatures or direct sunlight. Oxidising agents.
9.2. Other information         Other information         SECTION 10: Stability and read         10.1. Reactivity         Reactivity         10.2. Chemical stability         Stability         10.3. Possibility of hazardous         Possibility of hazardous         reactions         10.4. Conditions to avoid         Conditions to avoid         10.5. Incompatible materials         Materials to avoid	activity There are no known reactivity hazards associated with this product. Stable at normal ambient temperatures and when used as recommended. reactions No potentially hazardous reactions known. Avoid exposure to high temperatures or direct sunlight. Oxidising agents.
9.2. Other information         Other information         SECTION 10: Stability and read         10.1. Reactivity         Reactivity         10.2. Chemical stability         Stability         10.3. Possibility of hazardous         Possibility of hazardous         reactions         10.4. Conditions to avoid         Conditions to avoid         10.5. Incompatible materials         Materials to avoid         10.6. Hazardous decomposition	activity There are no known reactivity hazards associated with this product. Stable at normal ambient temperatures and when used as recommended. reactions No potentially hazardous reactions known. Avoid exposure to high temperatures or direct sunlight. Oxidising agents. on products Carbon monoxide (CO). Carbon dioxide (CO2).
9.2. Other information         Other information         SECTION 10: Stability and read         10.1. Reactivity         Reactivity         10.2. Chemical stability         Stability         10.3. Possibility of hazardous         Possibility of hazardous         reactions         10.4. Conditions to avoid         Conditions to avoid         10.5. Incompatible materials         Materials to avoid         10.6. Hazardous decomposition         products	activity There are no known reactivity hazards associated with this product. Stable at normal ambient temperatures and when used as recommended. reactions No potentially hazardous reactions known. Avoid exposure to high temperatures or direct sunlight. Oxidising agents. on products Carbon monoxide (CO). Carbon dioxide (CO2). formation

Skin corrosion/irritation

Skin corrosion/irritation	Based on available data the classification criteria are not met.	
Serious eye damage/irritation Serious eye damage/irritation	Causes serious eye irritation.	
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. 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 in	ngredients.	
	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	
Acute toxicity - or	ral	
Notes (oral LD₅₀)	LD₅₀ > 5000 mg/kg, Oral, Rat (OECD 401)	
Acute toxicity - de	ermal	
Notes (dermal LI	<b>D₅o)</b> LD₅o > 2000 mg/kg, Dermal, Rabbit (OECD 402)	
Acute toxicity - inhalation		
Notes (inhalation	<b>LC50)</b> $LC_{50} > 5,53 \text{ mg/l, Inhalation, Rat (OECD 403)}$	
	Distillates (petroleum), hydrotreated light paraffinic	
Acute toxicity - or	ral distance in the second	
Notes (oral LD₅₀)	LD₅₀ 5000 mg/kg, Oral, Rat	
Acute toxicity - de	ermal	
Notes (dermal LI	<b>D₅o)</b> LD₅₀ 2000 mg/kg, Dermal, Rabbit	
	zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	
Acute toxicity - o	ral	

Acute toxicity - oral

Notes (oral LD<sub>50</sub>) LD<sub>50</sub> 2600 mg/kg, Oral, 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 toxicity - fish	LL₅₀, 96 hours: > 100 mg/l, NOEL, 96 hours: ≥ 100 mg/l, WAF (OECD 203)	
Acute toxicity - aquatic invertebrates	EL50, 24 - 48 hours: > 10000 mg/l, 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, WAF (OECD 201)	
Acute toxicity - microorganisms	NOEL, 10 minutes: > 1,93 mg/l, Micro-organisms (wastewater sludge) (DIN 38412, DIN38409)	
Chronic toxicity - fish early life stage	NOELR, 14 days: >= 1000 mg/l, Onchorhynchus mykiss (Rainbow trout)	
Chronic toxicity - aquatic invertebrates	NOEL, 21 days: 10 mg/l, Daphnia magna WAF (OECD 211)	
zinc	bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	
Acute toxicity - fish	LL₅₀ 4,5 mg/l, 96 h Onchorhynchus mykiss (Rainbow trout)	
Acute toxicity - aquatic invertebrates	EC₅₀ 5,4 mg/l, 48 h Daphnia magna	
Acute toxicity - aquatic plants	EC₅₀ 2,1 mg/l, 72 h Selenastrum capricornutum	
Moly	bdenum polysulphide long chain alkyl dithiocarbamide complex	
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 100 mg/l, Daphnia magna	
12.2. Persistence and degradability		
Persistence and degradability No data	available.	
Biodegradation No data	available.	

Ecological information on ingredients.

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

Biodegradation	2 - 4 %, 28 d (OECD TG 301 B)
	zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)
Biodegradation	1,5 %, 28 d
12.3. Bioaccumulative potenti	<u>al</u>
Bioaccumulative potential	No data available on bioaccumulation.
Partition coefficient	-
Ecological information on ingr	redients.
	zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)
Partition coefficie	ent log Pow 0,59-1,2 @ 23°C
12.4. Mobility in soil	
Mobility	No data available.
12.5. Results of PBT and vPv	B assessment
Results of PBT and vPvB assessment	No data available.
12.6. Other adverse effects	
Other adverse effects	None known.
SECTION 13: Disposal consid	derations
SECTION 13: Disposal consideration 13.1. Waste treatment method	
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13.1. Waste treatment method	ds 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.
13.1. Waste treatment method Disposal methods	ds 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.
13.1. Waste treatment method Disposal methods SECTION 14: Transport inform	ds         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.         mation         The product is not covered by international regulations on the transport of dangerous goods
13.1. Waste treatment method Disposal methods SECTION 14: Transport inform General	ds         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.         mation         The product is not covered by international regulations on the transport of dangerous goods
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13.1. Waste treatment method         Disposal methods         SECTION 14: Transport inform         General         14.1. UN number         -	ds 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. mation The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
13.1. Waste treatment method         Disposal methods         SECTION 14: Transport inform         General         14.1. UN number         -         UN No. (ADR/RID)	ds 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. mation The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
13.1. Waste treatment method         Disposal methods         SECTION 14: Transport inform         General         14.1. UN number         -         UN No. (ADR/RID)         14.2. UN proper shipping name	ds         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.         mation         The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).         -         1
13.1. Waste treatment method         Disposal methods         SECTION 14: Transport inform         General         14.1. UN number         -         UN No. (ADR/RID)         14.2. UN proper shipping name         Proper shipping name         (ADR/RID)	ds         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.         mation         The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).         -         1
13.1. Waste treatment method         Disposal methods         SECTION 14: Transport inform         General         14.1. UN number         -         UN No. (ADR/RID)         14.2. UN proper shipping name         (ADR/RID)         14.3. Transport hazard class(	ds         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.         mation         The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).         -         1
13.1. Waste treatment method         Disposal methods         SECTION 14: Transport inform         General         14.1. UN number         -         UN No. (ADR/RID)         14.2. UN proper shipping name         (ADR/RID)         14.3. Transport hazard class(         ADR/RID class	ds         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.         mation         The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).         -         1

## Environmentally hazardous substance/marine pollutant No.

#### 14.6. Special precautions for user

Not applicable.

#### 14.7. Transport in bulk according to Annex II of MARPOL73/78 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). 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	DNEL = Derived No-Effect Level
used in the safety data sheet	WAF = Water Accommodated Fraction
Key literature references and sources for data	The manufacturer's SDS. 22.12.2015
Revision comments	This is first issue. (new SDS software has been introduced)
Revision date	19/02/2016
Supersedes date	17/04/2014
SDS number	5619
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.
	H319 Causes serious eye irritation.
	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 dithiocarbamide complex. May produce an allergic reaction.