NESTE OIL

SAFETY DATA SHEET NESTE HYPOIDI TDL S 75W-90

SECTION 1: Identification of the substance/mixture and of the company/undertaking		
1.1. Product identifier		
Product name	NESTE HYPOIDI TDL S 75W-90	
Product number	ID 14070	
Internal identification	2408	
1.2. Relevant identified uses of the substance or mixture and uses advised against		
Identified uses	Transmission oil.	
1.3. Details of the supplier of t	he 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 nul	mber	
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 identific	ation	
2.1. Classification of the subst	ance or mixture	
Classification		
Physical hazards	Not Classified	
Health hazards	Skin Sens. 1 - H317	
Environmental hazards	Not Classified	
2.2. Label elements		
Pictogram		
Signal word	Warning	
Hazard statements	H317 May cause an allergic skin reaction.	
Precautionary statements	P261 Avoid breathing vapour/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P362+P364 Take off contaminated clothing and wash it before reuse. P501 Dispose of contents/container in accordance with national regulations. P102 Keep out of reach of children.	
Contains	Di-tert-butyl polysulfide, Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	

2.3. Other hazards

	on ingredients	
3.2. Mixtures		
Dec-1-ene, homopolymer, hydrogena	ated	50 - < 60 %
CAS number: 68037-01-4	EC number: 500-183-1	REACH registration number: 01- 2119486452-34-XXXX
Classification Asp. Tox. 1 - H304		
Di-tert-butyl polysulfide		2,5 - < 5 %
CAS number: 68937-96-2	EC number: 273-103-3	REACH registration number: 01- 2119540515-43-XXXX
Classification Skin Sens. 1B - H317 Aquatic Chronic 3 - H412		
Reaction products of bis(4-methylper yl)dithiophosphoric acid with phospho oxide and amines, C12-14-alkyl (bran	orus oxide, propylene	1 - < 2,5 %
CAS number: —	EC number: 931-384-6	REACH registration number: 01- 2119493620-38-XXXX
CAS number: — Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	EC number: 931-384-6	_
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	EC number: 931-384-6	_
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318 Skin Sens. 1 - H317	EC number: 931-384-6 EC number: 209-909-9	2119493620-38-XXXX
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411 O,O,O-triphenyl phosphorothioate		2119493620-38-XXXX 0,3 - < 0,5 % REACH registration number: 01-
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411 O,O,O-triphenyl phosphorothioate CAS number: 597-82-0 Classification Repr. 2 - H361	EC number: 209-909-9	2119493620-38-XXXX 0,3 - < 0,5 % REACH registration number: 01- 2119979545-21-XXXX

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 promptly if symptoms occur after washing.
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 sensitising substance. May cause an allergic skin reaction. May cause eye irritation.
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 from	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. Sulphurous gases (SOx). Nitrous gases (NOx). Hydrogen sulphide (H2S). Aldehydes.
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	e 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	<u>s</u>
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
Reference to other sections	For personal protection, see Section 8.
SECTION 7: Handling and sto	rage
7.1. Precautions for safe hand	ling

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 Contro	Is/personal protection	
8.1. Control parameters		
8.2. Exposure controls		
Appropriate engineering controls	All handling should only take place in well-ventilated areas. Avoid the formation of mists. 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 Che	emical Properties	
0.4. Information on basis abus		
9.1. Information on basic phys	ical and chemical properties	
<u>9.1. Information on basic phys</u> Appearance	ical and chemical properties Liquid.	
Appearance	Liquid.	
Appearance Colour	Liquid. Tan.	
Appearance Colour Odour	Liquid. Tan.	
Appearance Colour Odour Odour threshold	Liquid. Tan.	
Appearance Colour Odour Odour threshold pH	Liquid. Tan. Petroleum. -	
Appearance Colour Odour Odour threshold pH Melting point	Liquid. Tan. Petroleum. - - -48°C Pour point	
Appearance Colour Odour Odour threshold pH Melting point Initial boiling point and range	Liquid. Tan. Petroleum. - -48°C Pour point > 150°C @	
Appearance Colour Odour Odour threshold pH Melting point Initial boiling point and range Flash point	Liquid. Tan. Petroleum. - -48°C Pour point > 150°C @	
Appearance Colour Odour Odour threshold pH Melting point Initial boiling point and range Flash point Flammability (solid, gas) Upper/lower flammability or	Liquid. Tan. Petroleum. - -48°C Pour point > 150°C @ 196°C COC (Cleveland open cup). -	
Appearance Colour Odour Odour threshold pH Melting point Initial boiling point and range Flash point Flammability (solid, gas) Upper/lower flammability or explosive limits	Liquid. Tan. Petroleum. - -48°C Pour point > 150°C @ 196°C COC (Cleveland open cup). - Lower flammable/explosive limit: 8 % Upper flammable/explosive limit: 0,6 % (calculated)	
Appearance Colour Odour Odour threshold pH Melting point Initial boiling point and range Flash point Flammability (solid, gas) Upper/lower flammability or explosive limits Vapour pressure	Liquid. Tan. Petroleum. - -48°C Pour point > 150°C @ 196°C COC (Cleveland open cup). - Lower flammable/explosive limit: 8 % Upper flammable/explosive limit: 0,6 % (calculated)	

Partition coefficient	-
Auto-ignition temperature	-
Decomposition Temperature	-
Viscosity	~100 mm2/s @ 40°C ~15 mm2/s @ 100°C
Explosive properties	-
Oxidising properties	-
9.2. Other information	
Other information	Not known.
SECTION 10: Stability and rea	ctivity
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	
10.5. Incompatible materials Materials to avoid	Oxidising agents.
·	
Materials to avoid	
Materials to avoid 10.6. Hazardous decompositio Hazardous decomposition	n products Aldehydes. Carbon dioxide (CO2). Carbon monoxide (CO). Hydrogen sulphide (H2S). Nitrous gases (NOx). Sulphurous gases (SOx).
Materials to avoid 10.6. Hazardous decomposition Hazardous decomposition products	Aldehydes. Carbon dioxide (CO2). Carbon monoxide (CO). Hydrogen sulphide (H2S). Nitrous gases (NOx). Sulphurous gases (SOx).
Materials to avoid 10.6. Hazardous decomposition Hazardous decomposition products SECTION 11: Toxicological int	Aldehydes. Carbon dioxide (CO2). Carbon monoxide (CO). Hydrogen sulphide (H2S). Nitrous gases (NOx). Sulphurous gases (SOx).
Materials to avoid 10.6. Hazardous decomposition Hazardous decomposition products SECTION 11: Toxicological int 11.1. Information on toxicologi	Aldehydes. Carbon dioxide (CO2). Carbon monoxide (CO). Hydrogen sulphide (H2S). Nitrous gases (NOx). Sulphurous gases (SOx).
Materials to avoid 10.6. Hazardous decomposition Hazardous decomposition products SECTION 11: Toxicological inf 11.1. Information on toxicologi Toxicological effects Skin corrosion/irritation	Aldehydes. Carbon dioxide (CO2). Carbon monoxide (CO). Hydrogen sulphide (H2S). Nitrous gases (NOx). Sulphurous gases (SOx). formation cal effects Not classified.
Materials to avoid 10.6. Hazardous decomposition Hazardous decomposition products SECTION 11: Toxicological int 11.1. Information on toxicologi Toxicological effects Skin corrosion/irritation Skin corrosion/irritation Serious eye damage/irritation	Aldehydes. Carbon dioxide (CO2). Carbon monoxide (CO). Hydrogen sulphide (H2S). Nitrous gases (NOx). Sulphurous gases (SOx). formation cal effects Not classified. Based on available data the classification criteria are not met.,May cause skin irritation. Based on available data the classification criteria are not met. May irritate eyes. Supplier's
Materials to avoid 10.6. Hazardous decomposition Hazardous decomposition products SECTION 11: Toxicological inf 11.1. Information on toxicologi Toxicological effects Skin corrosion/irritation Serious eye damage/irritation Serious eye damage/irritation Respiratory sensitisation	Aldehydes. Carbon dioxide (CO2). Carbon monoxide (CO). Hydrogen sulphide (H2S). Nitrous gases (NOx). Sulphurous gases (SOx). formation cal effects Not classified. Based on available data the classification criteria are not met.,May cause skin irritation. Based on available data the classification criteria are not met. May irritate eyes. Supplier's information. Bridging principle (Dilution).
Materials to avoid 10.6. Hazardous decomposition Hazardous decomposition products SECTION 11: Toxicological int 11.1. Information on toxicologi Toxicological effects Skin corrosion/irritation Serious eye damage/irritation Serious eye damage/irritation Respiratory sensitisation Respiratory sensitisation Skin sensitisation	Aldehydes. Carbon dioxide (CO2). Carbon monoxide (CO). Hydrogen sulphide (H2S). Nitrous gases (NOx). Sulphurous gases (SOx). formation cal effects Not classified. Based on available data the classification criteria are not met.,May cause skin irritation. Based on available data the classification criteria are not met. May irritate eyes. Supplier's information. Bridging principle (Dilution). Based on available data the classification criteria are not met.

Carcinogenicity	Based on available data the classification criteria are not met.	
Reproductive toxicity Reproductive toxicity - fertility	y 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		
Aspiration hazard Aspiration hazard		
Toxicological information on	ingredients.	
	Dec-1-ene, homopolymer, hydrogenated	
Acute toxicity -	oral	
Notes (oral LD₅	₀) LD₅₀ > 5000 mg/kg, Oral, Rat	
Acute toxicity -	dermal	
Notes (dermal l	_D₅0) LD₅₀ > 2000 mg/kg, Dermal, Rabbit	
Acute toxicity -	inhalation	
Notes (inhalatio	n LC ₅₀ > 5,2 mg/l, (4h), Inhalation, Rat	
Skin corrosion/i	rritation	
Animal data	Not irritating. Rabbit	
Serious eye da	mage/irritation	
Serious eye damage/irritatio	Slightly irritating. Rabbit n	
Skin sensitisatio	n	
Skin sensitisatio	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. OECD TG 406	
Germ cell muta	genicity	
Genotoxicity - i	n vitro Ames test: Negative.	
Aspiration haza	rd	
Aspiration haza	rd May be fatal if swallowed and enters airways.	
	Di-tert-butyl polysulfide	
Skin corrosion/i	rritation	
Animal data	Slightly irritating.	
Serious eye da	mage/irritation	
Serious eye damage/irritatio	Slightly irritating. n	
Skin sensitisatio	<u>on</u>	
Skin sensitisatio	on Sensitising. 1B	

	Reaction products of bis(4	-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and
		amines, C12-14-alkyl (branched)
	Acute toxicity - oral	
	Notes (oral LD₅₀)	LD₅₀ ~2000 mg/kg, Oral, Rat
	ATE oral (mg/kg)	500.0
	Serious eye damage/irritation	
	Serious eye damage/irritation	Causes burns.
	Skin sensitisation	
	Skin sensitisation	Local Lymph Node Assay (LLNA) Mouse OECD TG 429
SECTION	12: Ecological Information	
Ecological	information on ingredients.	
		O,O,O-triphenyl phosphorothioate
	Ecotoxicity	May cause long lasting harmful effects to aquatic life.
12.1. Toxic	-	way cause long lasting narmal elects to aquatic life.
Toxicity	 The pro	duct is not expected to be hazardous to the environment. Based on available data the action criteria are not met.
Foologiaal		
Ecological	information on ingredients.	
		Dec-1-ene, homopolymer, hydrogenated
	Acute toxicity - fish	LL₅₀, 96 hours: > 1000 mg/l, Onchorhynchus mykiss (Rainbow trout) WAF
	Acute toxicity - aquatic invertebrates	EL50, 48 hours: > 1000 mg/l, Daphnia magna WAF, OECD TG 202
	Acute toxicity - aquatic plants	EL50, 72 hours: > 1000 mg/l, Algae WAF, OECD RG 201
	Chronic toxicity - aquatic invertebrates	NOELR, 21 days: 125 mg/l, Daphnia magna WAF, OECD TG 211
	Reaction products of bis(4	-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and
		amines, C12-14-alkyl (branched)
	Acute toxicity - fish	LL₅₀ ~24 mg/l, 48 h, WAF Onchorhynchus mykiss (Rainbow trout) OECD TG 203
	Acute toxicity - aquatic invertebrates	EL50 ~91,4 mg/l, 48 h, WAF Daphnia magna OECD TG 202

Acute toxicity - aquatic plants Chronic toxicity - aquatic invertebrates	ErC50 15 mg/l, 96 h Pseudokirchneriella subcapitata OECD TG 201 NOEC 3,3 mg/l, 96 h Pseudokirchneriella subcapitata OECD TG 201 NOEC 0,12 mg/l, 21 d Daphnia magna WAF
	OECD TG 211 O,O,O-triphenyl phosphorothioate
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 OECD TG 202
Acute toxicity - aquatic plants	EC₅₀, 72 hours: > 100 mg/l, Desmodesmus subspicatus OECD TG 201
12.2. Persistence and degradability	
Persistence and degradability No data	a available.
Biodegradation No data	a available.
Ecological information on ingredients.	
	Dec-1-ene, homopolymer, hydrogenated
Biodegradation	Inherently biodegradable.
Reaction products of bis(4	I-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and
	amines, C12-14-alkyl (branched)
Biodegradation	7,4 %, 28 d
	O,O,O-triphenyl phosphorothioate
Biodegradation	Not inherently biodegradable. 18 %, 28 d
12.3. Bioaccumulative potential	
Bioaccumulative potential No data	a available on bioaccumulation.
Partition coefficient -	
Ecological information on ingredients.	
	Dec-1-ene, homopolymer, hydrogenated
Partition coefficient	log Pow > 6,5
	O,O,O-triphenyl phosphorothioate

Partition coefficier	nt log Pow 5,0
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	None known.
SECTION 13: Disposal conside	erations
13.1. Waste treatment methods	<u>8</u>
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 inform	ation
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(e	s)
ADR/RID class	-
14.4. Packing group	
ADR/RID packing group	-
14.5. Environmental hazards	
Environmentally hazardous sub No.	ostance/marine pollutant
14.6. Special precautions for us	ser
Not applicable.	
14.7. Transport in bulk accordin	ng to Annex II of MARPOL73/78 and the IBC Code
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
SECTION 15: Regulatory inform	nation
15.1. Safety, health and enviro	nmental 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

Key literature references and sources for data	The manufacturer's SDS. 9.9.2015
Revision comments	This is first issue. (new SDS software has been introduced)
Revision date	10/12/2015
Supersedes date	06/02/2014
SDS number	5570
Hazard statements in full	 H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H361 Suspected of damaging fertility or the unborn child. 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.