

Safety Data Sheet

according to Regulation (EU) 2015/830 Date of issue: 21/12/2015 Revision date: 21/12/2015

Supersedes: Version: 1.0

SECT	ION 1: Identification of the s	ubstance/mixture and of the company/undertaking
1.1.	Product identifier	
Product		: Mixture
Product		: ENOC Strata LSF 312
Product	code	: 252001
1.2.	Relevant identified uses of the su	ubstance or mixture and uses advised against
1.2.1.	Relevant identified uses	
Use of t	he substance/mixture	: Marine Diesel Engine Oil
1.2.2.	Uses advised against	
No addi	tional information available	
1.3.	Details of the supplier of the safe	ety data sheet
ENOC I Dubai -	Marketing L.L.C House I United Arab Emirates 4 313 4613 - F +971 4 313 4616	
1.4.	Emergency telephone number	
Emerge	ncy number	: +97143374400 (business hours)
SECT	ION 2: Hazards identification	1
2.1.	Classification of the substance o	r mixture
Classifi	cation according to Regulation (EC	C) No. 1272/2008 [CLP]
Not clas	sified	
	e physicochemical, human health a tional information available	and environmental effects
2.2.	Label elements	
Labellir	ng according to Regulation (EC) No	0. 1272/2008 [CLP]
	atements	: EUH208 - Contains Calcium petroleum sulfonate(61789-86-4). May produce an allergic reaction
2.3.	Other bezerde	
	Other hazards tional information available	
NU auui		
SECT	ION 3: Composition/informa	tion on ingredients
3.1.	Substance	
Not app	licable	
3.2.	Mixture	

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Paraffin oils (petroleum), catalytic dewaxed heavy, Baseoil - unspecified, [A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It consists predominantly of	(CAS No) 64742-70-7 (EC no) 265-174-4 (EC index no) 649-477-00-2	83.2	Carc. not classified according to note L of CLP
hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C).] (Note L)	(REACH-no) 01-2119487080-42-0003; 01- 2119487080-42 01-2119484627-25-0025; 01-2119484627-25 01-2119471299-27- 0019; 01-2119471299-27		(contains less than 3 % DMSO extract)

Safety Data Sheet

according to Regulation (EU) 2015/830

-Distillates (petroleum), hydrotreated heavy paraffinic (Note L)	(CAS No) 64742-54-7 (EC no) 265-157-1 (EC index no) 649-467-00-8 (REACH-no) 01-2119484627-25-0025; 01- 2119484627-25 01-2119471299-27-0019; 01-2119471299-27	11.5	Carc. not classified according to note L of CLP (contains less than 3 % DMSO extract)
Calcium petroleum sulfonate	(CAS No) 61789-86-4 (EC no) 263-093-9 (REACH-no) Not available	0.8	Skin Sens. 1, H317
Zinc alkyl dithiophosphate	(CAS No) 68649-42-3 (EC no) 272-028-3 (REACH-no) Not available	0.5	Eye Dam. 1, H318 Aquatic Chronic 2, H411

Note L : The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3. Full text of H-statements: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Wash off immediately with soap and plenty of water. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse immediately and plentifully with water, also under the eyelids, for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Do not induce vomiting. Never give anything by mouth to an unconscious person. Immediately get medical attention.
4.2. Most important symptoms and effect	ts, both acute and delayed
Symptoms/injuries after inhalation	: May cause irritation to the respiratory tract. May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	: Injection under the skin of pressurized hydrocarbons can cause severe, permanent tissue damage. May cause skin irritation / dermatitis.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. Caution if victim vomits: Risk of aspiration!.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	: carbon dioxide (CO2), water, dry chemical powder.	
Unsuitable extinguishing media	: None known.	
5.2. Special hazards arising from the su	ubstance or mixture	
Fire hazard	: None known.	
Explosion hazard	: None known.	
Hazardous decomposition products in case of fire	: Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide. Aldehydes. Sulfur oxides.	
5.3. Advice for firefighters		
Firefighting instructions	: Cool down the containers exposed to heat with a water spray.	
Protective equipment for firefighters	: Wear proper protective equipment. In case of fire: Wear self-contained breathing apparatus.	

SECTI	ON 6: Accidental release mea	sure	S
6.1.	Personal precautions, protective e	uipme	ent and emergency procedures
6.1.1.	For non-emergency personnel		
Protectiv	ve equipment	: W	/ear personal protection equipment.
Emerger	ncy procedures	: Ev	vacuate area. Avoid contact with skin, eyes and clothes.
6.1.2.	For emergency responders		
Protectiv	/e equipment	: W	/ear suitable protective clothing. In case of fire: Wear self-contained breathing apparatus.
Emerger	ncy procedures		vacuate and limit access. Stop leak if safe to do so. Use ventilation/water spray/fog to sperse vapours. Do not touch spilled material.
6.2.	Environmental precautions		

Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

Safety Data Sheet

according to Regulation (EU) 2015/830

6.3. Methods and material for conta	inment and cleaning up
For containment	: Clean up any spills as soon as possible, using an absorbent material to collect it. For larger spills, dike area and pump into waste containers.
Methods for cleaning up	: Collect all waste in suitable and labelled containers and dispose according to local legislation.
6.4. Reference to other sections	
No additional information available	
SECTION 7: Handling and storag	e
7.1. Precautions for safe handling	
Additional hazards when processed	: Handling this product may result in electrostatic accumulation. Use proper grounding procedures.
Precautions for safe handling	: Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Avoid static electricity discharges. Provide earthing of containers, equipment, pumps and ventilation facilities.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Handle in accordance with good industrial hygiene and safety practices. Take off contaminated clothes. Wash contaminated clothing prior to re-use.
7.2. Conditions for safe storage, inc	luding any incompatibilities
Storage conditions	: Store in a dry, cool and well-ventilated place.
Special rules on packaging	: Keep only in original container.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/p	ersonal protection
8.1. Control parameters	

No additional information available

8.2. Exposure controls	
Appropriate engineering controls	: Either local exhaust or general room ventilation is usually required.
Personal protective equipment	: Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.
Materials for protective clothing	: Wear suitable protective clothing. Natural fibres (e.g. cotton)
Hand protection	: Wear suitable gloves tested to EN374. Thickness of glove material: > 0.13 mm. Break through time: ≥ 480 min
Eye protection	: Use splash goggles when eye contact due to splashing is possible. DIN EN 166
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. Wear a respirator conforming to EN140 with Type A/P2 filter or better



SECTION 9: Physical and chemica	al properties
9.1. Information on basic physical and	d chemical properties
Physical state	: Liquid
Colour	: brown.
Odour	: Characteristics.
Odour threshold	: No data available
рН	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 250 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
04/40/0045	

Safety Data Sheet

according to Regulation (EU) 2015/830

Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.8938 g/cm³ @ 15°C
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: 11 mm²/s @ 100°C
Viscosity, dynamic	: No data available
Explosive properties	: Not explosive. However, formation of explosive air/vapour mixtures are possible.
Oxidising properties	: not oxidizing.
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTI	ON 10: Stability and reactivity
10.1.	Reactivity
Stable u	nder normal conditions.
10.2.	Chemical stability
Stable u	nder normal conditions.
10.3.	Possibility of hazardous reactions
None kn	own under normal conditions of use. No polymerization.
10.4.	Conditions to avoid
Keep aw	vay from heat/sparks/open flames/hot surfaces No smoking.
10.5.	Incompatible materials
Strong o	oxidizing agents.
10.6.	Hazardous decomposition products

No hazardous decomposition products known at room temperature.

11.1. Information on toxicological effects	
Acute toxicity	: Not classified
Calcium petroleum sulfonate (61789-86-4)	
LD50 oral rat	> 20 g/kg
LD50 dermal rabbit	> 4000 mg/kg
-Distillates (petroleum), hydrotreated heavy	paraffinic (64742-54-7)
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 5000 mg/m³
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
ENOC Strata LSF 312	
Viscosity, kinematic	11 mm²/s @ 100°C

SECTIO	DN 12: Ecological information
12.1.	Toxicity

Safety Data Sheet

according to Regulation (EU) 2015/830

Calcium petroleum sulfonate (61789-86-4)	
LC50 fish 1	5.7 - 9.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
LC50 fish 2	1.0 - 10.0 mg/l (Exposure time: 96 h - Species: Pimephales prometas [static])
EC50 Daphnia 1	6.2 - 12 mg/l (Exposure time: 48 h - Species: Daphnia magna)
12.2. Persistence and degradability	
-Distillates (petroleum), hydrotreated heavy	
Persistence and degradability	Inherently biodegradable.
12.3. Bioaccumulative potential	
-Distillates (petroleum), hydrotreated heavy	
Bioaccumulative potential	Bioaccumulative potential.
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessme	ent
Component	
-Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal consideration	ns
13.1. Waste treatment methods	
Regional legislation (waste)	: Waste disposal according to EC directives 75/442/EEC and 91/689/EEC in the corresponding versions, covering waste and dangerous waste.
Waste treatment methods	: Can be incinerated according to local regulations.
Naste disposal recommendations	: Dispose of this material and its container to hazardous or special waste collection point.
European List of Waste (LoW) code	: 13 02 05* - mineral-based non-chlorinated engine, gear and lubricating oils
n accordance with ADR / RID / IMDG / IATA / A I4.1. UN number	
UN-No. (ADR)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable
UN-No. (ADN)	: Not applicable
UN-No. (RID)	: Not applicable
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable
14.3. Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	: Not applicable
IMDG	
Transport hazard class(es) (IMDG)	: Not applicable
ΙΑΤΑ	
Transport hazard class(es) (IATA)	: Not applicable
ADN	
Transport hazard class(es) (ADN)	: Not applicable
RID	

Safety Data Sheet

according	to	Regulation	(EU)	2015/830
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Transport hazard class(es) (RID)	: Not applicable
14.4. Packing group	
Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable
14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code 14.7.

Not applicable

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture 15.1.

15.1.1. **EU-Regulations**

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Other information, restriction and prohibition : International regulatory information: AICS: Australia. Inventory of Chemical Substances (AICS) (as amended through 1 September regulations 2015) CAS RN: 64742-54-7 Name: Distillates, petroleum, hydrotreated heavy paraffinic Note(s): aU -This entry is a chemical of unknown or variable composition, a complex product of a chemical reaction, or a biological material (UVCB); the Australian inventory denotes this by putting an asterisk (*) after the CAS number. DSL: Canada. Domestic Substances List (DSL), as amended through September 23, 2015 CAS RN: 64742-54-7 Name: Distillates, petroleum, hydrotreated heavy paraffinic Canada. Categorization of Existing Substances on DSL (September 2006) CAS RN: 64742-54-7 Name: DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC Substance category: UORG Meets CEPA criteria: Yes Meets human health criteria: Yes Human health priority: High Meets environmental criteria: No Persistent: Yes Bioaccumulative: No Inherently toxic to aquatic organisms: No UVCBs-organic Notes: ENCS: not listed KECI: Korea. Existing Chemicals Inventory (KECI, January 27, 2015, amended through MoE 2015-95, July 1, 2015) CAS RN: 64742-54-7 21/12/2015 EN (English) 6/8

Safety Data Sheet

according to Regulation (EU) 2015/830 Name: Distillates (petroleum), hydrotreated heavy paraffinic Korean ID Number: KE-12546 PICCS: Philippines. Inventory of Chemicals and Chemical Substances (PICCS) 2012 CAS RN: 64742-54-7 Name: Distillates (petroleum), hydrotreated heavy paraffinic TSCA: U.S. Federal, TSCA TSCA IUR 2006, Partially Exempt Petroleum Process Streams (40 CFR 710.46(b)(1)) CAS RN: 64742-54-7 Name: DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC TSCA CDR, Partially Exempt Petroleum Process Streams (40 CFR 711.6(b)(1)) (September 6, 2011) CAS RN: 64742-54-7 Name: Distillates (petroleum), hydrotreated heavy paraffinic TSCA High Production Volume (HPV) Chemicals: 1990, 1994 & Post-1994 Additions (01/20/06) CAS RN: 64742-54-7 Name: DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC 1990 HPV Challenge Program Chemical HPV Indicator Value (see notes): 0 Chemical is a candidate for sponsorship under the HPV Challenge Program HPV Sponsorship Value (see notes): F Fully Sponsored Chemical . International regulatory information: AICS: Australia. Inventory of Chemical Substances (AICS) (as amended through 1 September 2015) CAS RN: 64742-70-7 Name: Paraffin oils, petroleum, catalytic dewaxed heavy Note(s): aU This entry is a chemical of unknown or variable composition, a complex product of a chemical reaction, or a biological material (UVCB); the Australian inventory denotes this by putting an asterisk (*) after the CAS number. DSL: Canada. Domestic Substances List (DSL), as amended through September 23, 2015 CAS RN: 64742-70-7 may be regulated as a member of the Generics group for CAS RN: 8012-95-1 Generics group name: PARAFFIN OILS Substance category: UORG Meets CEPA criteria: Yes Meets human health criteria: Yes Human health priority: Moderate Meets environmental criteria: No Persistent: No Bioaccumulative: No Inherently toxic to aquatic organisms: No ENCS: not listed KECI: Korea. Existing Chemicals Inventory (KECI, January 27, 2015, amended through MoE 2015-95, July 1, 2015) Name: Paraffin oils (petroleum), catalytic dewaxed heavy Korean ID Number: KE-27774 PICCS: Philippines. Inventory of Chemicals and Chemical Substances (PICCS) 2012 CAS RN 64742-70-7 Name: Paraffin oils (petroleum), catalytic dewaxed heavy TSCA: U.S. Federal, TSCA TSCA IUR 2006, Partially Exempt Petroleum Process Streams (40 CFR 710.46(b)(1)) TSCA CDR, Partially Exempt Petroleum Process Streams (40 CFR 711.6(b)(1)) (September 6, 2011) CAS RN: 64742-70-7 Name: PARAFFIN OILS (PETROLEUM), CATALYTIC DEWAXED HEAVY CAS RN: 64742-70-7 may be regulated as a member of the Generics group for CAS RN: 8012-95-1 Generics group name: PARAFFIN OILS TSCA High Production Volume (HPV) Chemicals: 1990, 1994 & Post-1994 Additions (01/20/06) CAS RN: 64742-70-7 may be regulated as a member of the Generics group for CAS RN: 8012-95-1 Generics group name: Paraffin oils CAS RN: 64742-70-7 Name: Paraffin oils (petroleum), catalytic dewaxed heavy CAS RN: 64742-70-7 Name: PARAFFIN OILS, PETROLEUM, CATALYTIC DEWAXED HEAVY 1990 HPV Challenge Program Chemical HPV Indicator Value (see notes): 0 HPV Sponsorship Value (see notes): F Notes: 0 Chemical is a candidate for sponsorship under the HPV Challenge Program; F Fully Sponsored Chemical.

Safety Data Sheet

according to Regulation (EU) 2015/830

Germany	
VwVwS Annex reference	: Water hazard class (WGK) 3, severe hazard to waters (Classification according to VwVwS, Annex 4)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)
Netherlands	
SZW-lijst van kankerverwekkende stoffen	: Zinc alkyl dithiophosphate,-Distillates (petroleum), hydrotreated heavy paraffinic,Calcium petroleum sulfonate,Paraffin oils (petroleum), catalytic dewaxed heavy, Baseoil - unspecified, [A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C).] are listed
SZW-lijst van mutagene stoffen	: Zinc alkyl dithiophosphate,-Distillates (petroleum), hydrotreated heavy paraffinic,Paraffin oils (petroleum), catalytic dewaxed heavy, Baseoil - unspecified, [A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C).] are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: None of the components are listed
Denmark	
Classification remarks	: Emergency management guidelines for the storage of flammable liquids must be followed
Recommendations Danish Regulation	: The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

A chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: Other information

Other information

: It is the user's responsibility to take the mentioned precautionary measures and to ensure that this information is complete and sufficient for the use of this product. Such information is actually to be best of our knowledge and believes accurate as reliable.

Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Sens. 1	Sensitisation — Skin, Category 1
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H411	Toxic to aquatic life with long lasting effects
EUH208	Contains . May produce an allergic reaction

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product