Safety Data Sheet

according to Regulation (EU) 2015/830 Date of issue: 21/12/23 Version: 1.0



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

1.1. Product identifier

Product form : Mixture

Product name : ENMAR LSF 312

Product code : 152001

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Marine Diesel Engine Oil

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Nerita Limited Ltd., Hong Kong technical@neritaltd.com

1.4. Emergency telephone number

Emergency contact : technical@neritaltd.com

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH208 - Contains Calcium petroleum sulfonate(61789-86-4). May produce an allergic

reaction

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

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)

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-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 effects, 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 Symptoms/injuries after ingestion

May cause eye irritation.

: 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 substance 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear personal protection equipment.

Emergency procedures : Evacuate area. Avoid contact with skin, eyes and clothes.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing. In case of fire: Wear self-contained breathing apparatus. Emergency procedures : Evacuate and limit access. Stop leak if safe to do so. Use ventilation/water spray/fog to

disperse vapours. Do not touch spilled material.

6.2. Environmental precautions

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

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Methods and material for containment 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.

Reference to other sections

No additional information available

SECTION 7: Handling and storage

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.

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.

Conditions for safe storage, including any incompatibilities

Storage conditions

Hygiene measures

7.2.

: Store in a dry, cool and well-ventilated place.

Special rules on packaging Keep only in original container.

Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

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

: Liquid

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



Physical state





SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Colour : brown. Odour : Characteristics. No data available Odour threshold рΗ No data available Relative evaporation rate (butyl acetate=1) : No data available Melting point : No data available No data available Freezing point Boiling point No data available

Flash point 250 °C

Auto-ignition temperature : No data available : No data available Decomposition temperature Flammability (solid, gas) : No data available

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Vapour pressure : No data available Relative vapour density at 20 °C : No data available Relative density No data available : 0.8938 g/cm3 @ 15°C Density 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

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known under normal conditions of use. No polymerization.

10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

No hazardous decomposition products known at room temperature.

SECTION 11: Toxicological information

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 : Not classified Serious eye damage/irritation Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified : Not classified Reproductive toxicity Specific target organ toxicity (single exposure) : Not classified Specific target organ toxicity (repeated : Not classified exposure)

Aspiration hazard : Not classified

Aspiration nazaru	. Not classified
ENMAR LSF 312	
Viscosity, kinematic	11 mm²/s @ 100°C

SECTION 12: Ecological information

12.1. Toxicity

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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 promelas [semi-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 paraffinic (64742-54-7)	
Persistence and degradability	Inherently biodegradable.

12.3. Bioaccumulative potential

-Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Bioaccumulative potential	Bioaccumulative potential.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

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 considerations

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.

Waste 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

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. 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

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

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Transport hazard class(es) (RID) : Not applicable

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

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

15.1.1. **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 regulations

: International regulatory information:

AICS: Australia. Inventory of Chemical Substances (AICS) (as amended through 1 September

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

Notes: **UVCBs-organic**

ENCS: not listed

KECI: Korea. Existing Chemicals Inventory (KECI, January 27, 2015, amended through MoE

2015-95, July 1, 2015)

CÁS RN: 64742-54-7

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Name: Distillates (petroleum), hydrotreated heavy paraffinic
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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.

15.1.2. National regulations

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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-liist 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

: None of the components are listed

giftige stoffen – Vruchtbaarheid

: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling

Denmark

Classification remarks

: Emergency management guidelines for the storage of flammable liquids must be followed

: The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

Recommendations Danish Regulation

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

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