



ENOC ARMOUREX H

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 11/04/2016

Revision date: 11/02/2016

Supersedes:

Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Product name : ENOC ARMOUREX H
Product code : 224021

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 : Open Gear Lubricants

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ENOC Marketing L.L.C
ENOC House I
Dubai - United Arab Emirates
T +971 4 313 4613 - F +971 4 313 4616

1.4. Emergency telephone number

Emergency number : +97143374400
(business hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Sensitisation — Skin, Category 1 H317 Calculation method

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning
Hazardous ingredients : Amines, C12-14-tert-alkyl
Hazard statements (CLP) : H317 - May cause an allergic skin reaction
Precautionary statements (CLP) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302+P352 - IF ON SKIN: Wash with plenty of water
P321 - Specific treatment (see supplemental first aid instruction on this label)
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

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3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Asphalt	(CAS No) 8052-42-4 (EC no) 232-490-9 (REACH-no) 01-2119480172-44	84.5	Not classified
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).] (Note L)	(CAS No) 64742-70-7 (EC no) 265-174-4 (EC index no) 649-477-00-2 (REACH-no) 01-2119487080-42-0003; 01-2119487080-42 01-2119484627-25-0025; 01-2119484627-25 01-2119471299-27-0019; 01-2119471299-27	13.8	Not classified
Amines, C12-14-tert-alkyl	(CAS No) 68955-53-3 (EC no) 273-279-1 (REACH-no) not available	0 - 0.15	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1B, H314 Skin Sens. 1A, H317 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Phosphoric acid, dipentyl ester	(CAS No) 3138-42-9 (EC no) 221-537-9 (REACH-no) not available	0 - 0.15	Skin Corr. 1C, H314 Eye Dam. 1, H318

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	: May cause eye irritation.

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 (CO ₂), 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.

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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.

6.3. 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.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

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, including 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/personal protection

8.1. Control parameters

Asphalt (8052-42-4)		
Belgium	Limit value (mg/m ³)	5 mg/m ³ (fume)
Bulgaria	OEL TWA (mg/m ³)	5.0 mg/m ³
Bulgaria	OEL STEL (mg/m ³)	10.0 mg/m ³
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	5 mg/m ³
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m ³)	10 mg/m ³
Denmark	Grænseværdie (langvarig) (mg/m ³)	1 mg/m ³ (Cyclohexane fraction of total dust-fume)
Estonia	OEL TWA (mg/m ³)	5 mg/m ³ (fume)
Greece	OEL TWA (mg/m ³)	5 mg/m ³
Ireland	OEL (8 hours ref) (mg/m ³)	0.5 mg/m ³ (petroleum fumes)
Ireland	OEL (15 min ref) (mg/m ³)	10 mg/m ³ (petroleum fumes-inhalable fraction)
Poland	NDS (mg/m ³)	5 mg/m ³ (inhalable fraction)
Poland	NDSch (mg/m ³)	10 mg/m ³ (inhalable fraction)
Portugal	OEL TWA (mg/m ³)	0.5 mg/m ³ (fumes, inhalable fraction)
Romania	OEL TWA (mg/m ³)	5 mg/m ³ (fume)
Slovenia	OEL TWA (ppm)	10 ppm (aerosol and vapor in thermal treatment)
Spain	VLA-ED (mg/m ³)	0.5 mg/m ³ (fume)
United Kingdom	WEL TWA (mg/m ³)	5 mg/m ³ (fumes)
United Kingdom	WEL STEL (mg/m ³)	10 mg/m ³ (fumes)
Norway	Grænseverdier (AN) (mg/m ³)	5 mg/m ³ (fume)

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Asphalt (8052-42-4)		
Norway	Grenseverdier (Korttidsverdi) (mg/m ³)	5 mg/m ³ (fume)
Switzerland	VME (mg/m ³)	10 mg/m ³ (hot processing-aerosol and vapor)
Australia	TWA (mg/m ³)	5 mg/m ³ (fume)
Canada (Quebec)	VEMP (mg/m ³)	5 mg/m ³ (fume)
USA - ACGIH	ACGIH TWA (mg/m ³)	0.5 mg/m ³ (fume, inhalable fraction)
USA - NIOSH	NIOSH REL (ceiling) (mg/m ³)	5 mg/m ³ (fume)

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 chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Black.
Odour	: Characteristics.
Odour threshold	: No data available
pH	: 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	: 100 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.9516 g/mL @ 15°C
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: 700 mm ² /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.

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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

Amines, C12-14-tert-alkyl (68955-53-3)	
LD50 oral rat	300 mg/kg
Asphalt (8052-42-4)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
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
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Viscosity, kinematic	700 mm ² /s @ 100°C

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Asphalt (8052-42-4)	
BCF fish 1	(no bioaccumulation expected)
Log Pow	> 6

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

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.

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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
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IMDG

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

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

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

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

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- Rail transport

Not applicable

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

Not applicable

SECTION 15: Regulatory information

15.1. 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: 64742-70-7

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

Germany

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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. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : 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).], Amines, C12-14-tert-alkyl, Asphalt are listed

SZW-lijst van mutagene stoffen : 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).], Amines, C12-14-tert-alkyl, Asphalt 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

Class for fire hazard : Class III-1

Store unit : 50 liter

Classification remarks : Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product
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 mentioned precaution measures and 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:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Skin Sens. 1A	Sensitisation — Skin, category 1A
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
H301	Toxic if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H331	Toxic if inhaled
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

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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