

Safety Data Sheet

according to Regulation (EU) 2015/830 Date of issue:10/13/2015 Revision date:10/13/2015

Version: 1.0

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| SECTION 1: Identification of the substance | hixture and of the company/נ | undertaking | |
|--|---|-------------|---|
| I.1. Product identifier | | | |
| Product form : Mixte | ure | | |
| Product name : ENC | OC Vulcan HV 80 | | |
| Product code : 2000 | 045 | | |
| 1.2. Relevant identified uses of the substance of | r mixture and uses advised against | | |
| 1.2.1. Relevant identified uses | | | |
| Use of the substance/mixture : Dies | el Engine Oil | | |
| 1.2.2. Uses advised against | | | |
| No additional information available | | | |
| 1.3. Details of the supplier of the safety data she | eet | | |
| 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 | | | |
| 0,1 | 143374400 | | |
| | iness hours) | | |
| SECTION 2: Hazards identification | | | |
| 2.1. Classification of the substance or mixture | | | |
| Classification according to Regulation (EC) No. 1272/ | /2008 [CLP] | | |
| Not classified | | | |
| | | | |
| 2.2. Label elements | | | |
| _abelling according to Regulation (EC) No. 1272/2008 | 3 ICLP1 | | |
| Not applicable | | | |
| 2.3. Other hazards | | | |
| No additional information available | | | |
| | | | |
| SECTION 3: Composition/information on ir 3.1. Substance | ngredients | | |
| 3.1. Substance Not applicable | | | |
| | | | |
| 3.2. Mixture | | | |
| | | | |
| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
| Residual oils (petroleum), hydrotreated, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by treating | (CAS No) 64742-57-0 (EC no) 265-160-8 | 47 | Carc. not classified according to note L of CLP |
| a petroleum fraction with hydrogen in the presence of a | (EC index no) 649-470-00-4 | | |
| catalyst. It consists of hydrocarbons having carbon numbers predominantly greater than C25 and boiling above | (REACH-no) 01-2119489287-22 01- 2119480472-38-0013; 01-2119480472-38 | | (contains less than 3 % DMSO extract) |

| predominantly greater than C25 and boiling above approximately 400 °C (752 °F).] | 2119480472-38-0013; 01-2119480472-38 |
|--|---|
| 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).] | (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 |
| Zinc alkyl dithiophosphate | (CAS No) 68649-42-3 (EC no) 272-028-3 |

(REACH-no) Not available

Carc. not classified according to note L of CLP

(contains less than 3 % DMSO

Eye Dam. 1, H318 Aquatic Chronic 2, H411

extract)

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| 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 | s, both acute and delayed |
| Symptoms/injuries | : Aspiration of this material may cause chemical pneumonia. |
| Symptoms/injuries after inhalation | : May cause irritation to the respiratory tract. |
| 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 sub | stance 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. Sulphur 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 meas | ures |
| 6.1. Personal precautions, protective equ | |
| 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 authoritie | as if liquid optors sowers or public waters |

| Avoid re | lease to the environment. Notify authoriti | es | if liquid enters sewers or public waters. |
|----------|--|----|--|
| 6.3. | Methods and material for containment and cleaning up | | |
| For cont | ainment | : | 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 addit | ional information available | | |
| SECTI | ON 7: Handling and storage | | |
| 7.1. | Precautions for safe handling | | |
| Addition | al hazards when processed | : | Handling this product may result in electrostatic accumulation. Use proper grounding procedures. May result in aspiration into the lungs. |
| Precauti | ons 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. |

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| 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 storag | e, 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 control | bls/personal 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. |

Appropriate engineering controls Personal protective equipment Materials for protective clothing

Hand protection

Eye protection

Respiratory protection



: Wear suitable gloves tested to EN374. Thickness of glove material: > 0.13 mm. Break through time: ≥ 480 min.
: Use splash goggles when eye contact due to splashing is possible. DIN EN 166

: Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.

: Wear suitable protective clothing. Natural fibres (e.g. cotton)

: In case of inadequate ventilation wear respiratory protection. Wear a respirator conforming to EN140 with Type A/P2 filter or better.

| 0.1. Information on basic physical and | d chemical properties |
|---|--|
| Physical state | : Liquid |
| Colour | : amber. |
| 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 | : 260 °C (Open Cup) |
| 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 | : 0.88 g/cm³ @ 15.5°C |
| Solubility | : No data available |
| Log Pow | : No data available |
| Viscosity, kinematic | : 29.5 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 |

No additional information available

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| SECT | ION 10: Stability and reactivity | | | |
|---|------------------------------------|--|--|--|
| 10.1. | Reactivity | | | |
| Stable u | Stable under normal conditions. | | | |
| 10.2. | Chemical stability | | | |
| Stable u | inder 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 | | |
| 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 Vulcan HV 80 | | | |
| Viscosity, kinematic | 29.5 mm²/s @ 100°C | | |

| SECTIO | N 12: Ecological information | |
|-------------|------------------------------------|--|
| 12.1. T | Toxicity | |
| No addition | nal information available | |
| | | |
| 12.2. F | Persistence and degradability | |
| No addition | nal information available | |
| 12.3. E | Bioaccumulative potential | |
| No addition | nal information available | |
| 12.4. M | Mobility in soil | |
| No addition | nal information available | |
| 12.5. F | Results of PBT and vPvB assessment | |
| No additior | nal information available | |
| 12.6. 0 | Other adverse effects | |
| No addition | nal information available | |
| SECTIO | N 13: Disposal considerations | |
| 13.1. V | Naste treatment methods | |
| Regional le | egislation (waste) : | Waste disposal according to EC directives 75/442/EEC and 91/689/EEC in the corresponding versions, covering waste and dangerous waste. |
| Waste trea | tment methods : | Can be incinerated according to local regulations. |
| Waste disp | oosal recommendations : | Dispose of this material and its container to hazardous or special waste collection point. |
| European I | List of Waste (LoW) code : | 13 02 05* - mineral-based non-chlorinated engine, gear and lubricating oils |

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| SECTION 14: Transport information | on |
|--|--|
| In accordance with ADR / RID / IMDG / IATA | ADN |
| 14.1. UN number | |
| Not regulated for transport | |
| 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 | |
| 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 | |

14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 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

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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: regulations 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 . International regulatory information: AICS. Australia. Inventory of Chemical Substances (as amended through 1 September 2015) CAS RN: 64742-57-0 Name: Residual oils, petroleum, hydrotreated Note(s): aU Notes: 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, as amended through September 23, 2015 CAS RN: 64742-57-0 Name: Residual oils, petroleum, hydrotreated Canada. Categorization of Existing Substances on DSL (September 2006) CAS RN: 64742-57-0 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

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| | Meets human health criteria: Yes Human health priority: Moderate Meets environmental criteria: No Persistent: No Bioaccumulative: No Inherently toxic to aquatic organisms: No ENCS. Japan. Inventory of Existing & New Chemical Substances, as amended through July 30, 2015 CAS RN: 64742-57-0 Name: Residual oils (petroleum), hydrotreated (en-US) Japanese ENCS Number: (9)-1689 Japan. Industrial Safety & Health Law (ISHL) Inventory, as amended through June 26, 2015 CAS RN: 64742-57-0 Name: Residual oils (petroleum), hydrotreated (en-US) Japanese ENCS Number: (9)-1689 |
|---|--|
| | Japanese ISHL Number: (9)-1689 Notes iencs: Grandfathered onto ISHL from ENCS according to the Chemical Substance Control Law. KECI. Korea Existing Chemicals Inventory (January 27, 2015, amended through MoE 2015-95, July 1, 2015) CAS RN: 64742-57-0 Name: Residual oils (petroleum), hydrotreated Korean ID Number: KE-30119 |
| | PICCS. Philippines. Inventory of Chemicals and Chemical Substances (PICCS) 2012 CAS RN: 64742-57-0 Name: Residual oils (petroleum), hydrotreated |
| | U.S. Federal, TSCA. IUR 2006, Partially Exempt Petroleum Process Streams (40 CFR 710.46(b)(1)) CAS RN: 64742-57-0 Name: RESIDUAL OILS (PETROLEUM), HYDROTREATED CAS RN: 64742-57-0 may be regulated as a member of the Generics group for CAS RN: 8012-95-1 Generics group name: PARAFFIN OILS TSCA CDR, Partially Exempt Petroleum Process Streams (40 CFR 711.6(b)(1)) (September 6, 2011) CAS RN: 64742-57-0 may be regulated as a member of the Generics group for CAS RN: 8012-95-1 |
| | Generics group name: Paraffin oils CAS RN: 64742-57-0 Name: Residual oils (petroleum), hydrotreated TSCA High Production Volume (HPV) Chemicals: 1990, 1994 & Post-1994 Additions (01/20/06) CAS RN: 64742-57-0 Name: RESIDUAL OILS, PETROLEUM, HYDROTREATED 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 | |
| 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,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).],Residual oils (petroleum), hydrotreated, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly greater than C25 and boiling above approximately 400 °C (752 °F).] are listed

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| SZW-lijst van mutagene stoffen | : Zinc alkyl dithiophosphate,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).],Residual oils (petroleum), hydrotreated, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly greater than C25 and boiling above approximately 400 °C (752 °F).] 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 |
| 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 infe | ormation |
|--------------------------------|--|
| 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-staten | nents: |
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |
| Eve Dam 1 | Serious eve damage/eve irritation Category 1 |

| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |
|-------------------|---|
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| H318 | Causes serious eye damage |
| H411 | Toxic to aquatic life with long lasting effects |

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