

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 3-3-2020 Revision date: 19-6-2024 Supersedes version of: 17-4-2023 Version: 1.4

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

1.1. Product identifier

Product form	: Mixture
Trade name	: Enersynth FE 0W-1
Product code	: 01.41.03
Type of product	: Lubricants
Product group	: Trade product

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

1.2.1. Relevant identified uses

Main use category Use of the substance/mixture Function or use category

: Industrial use, Professional use, Consumer use

6

: Engine oil

- : Lubricants and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Kroon-Oil B.V. Dollegoorweg 15 NL 7602 EC Almelo Netherlands T 0031 (0)546 81 81 65 vib@kroon-oil.nl

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Cardiff Centre) University Hospital Llandough	Penlan Road CF64 2XX	0344 892 0111	Only for healthcare professionals

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

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

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

EUH-statements

: EUH210 - Safety data sheet available on request.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments

: Highly refined mineral oils and additives.

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
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	50 – 80	Asp. Tox. 1, H304
Blend of mineral oils * (*)(Note L)	-	2,5 – 5	Asp. Tox. 1, H304

Comments

: The highly refined mineral oil contains <3% (w/w) DMSOextract, according to IP346.

*.

*: contains one or more of the following CAS-numbers (REACH registration numbers): 64741-88-4 (01-2119488706-23), 64741-89-5 (01-2119487067-30), 64741-95-3 (01-2119487081-40), 64741-96-4 (01-2119483621-38), 64741-97-5 (01-2119480374-36), 64742-01-4 (01-2119488707-21), 64742-52-5 (01-2119467170-45), 64742-53-6 (01-2119480375-34), 64742-54-7 (01-2119484627-25), 64742-55-8 (01-2119487077-29), 64742-56-9 (01-2119480132-48), 64742-57-0 (01-2119489287-22), 64742-62-7 (01-2119480472-38), 64742-65-0 (01-2119471299-27), 64742-71-8 (01-211947129), 64742-71-8 (01-211947129), 64747129), 64747129, 64747129, 64747129, 64747129, 64747129, 64747129), 64747129, 64747129, 64747129, 64747129, 64747129, 64747129, 64747129), 64747129, 64747129, 64747129, 64747129, 64747129, 64747129, 64747129, 64747129, 64747129, 64747129, 64747129, 64747129, 64747129, 6474719, 6474719, 6474719, 6474719, 6474719, 6474719, 6474719, 6474719, 6474719, 6474719, 6474719, 6474789, 6474790, 6474719, 647788679, 6474789, 6477887886679, 64788866786 2119485040-48), 72623-85-9 (01-2119555262-43), 72623-86-0 (01-2119474878-16), 72623-87-1 (01-2119474889-13), 74869-22-0 (01-2119495601-36)

The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of Note L: dimethyl sulphoxide 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), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures 4.1. Description of first aid measures First-aid measures general : If you feel unwell, seek medical advice. : Remove person to fresh air and keep comfortable for breathing. First-aid measures after inhalation First-aid measures after skin contact : Wash skin with plenty of water. : Rinse eyes with water as a precaution. First-aid measures after eye contact First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell. 4.2. Most important symptoms and effects, both acute and delayed Symptoms/effects : No additional information available. Symptoms/effects after inhalation Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard. Symptoms/effects after skin contact : None under normal conditions. 19-6-2024 (Revision date) 2/11

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Symptoms/effects after eye contact	
Symptoms/effects after ingestion	

None under normal conditions.None under normal conditions.

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

Treat symptomatically.

SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media Unsuitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide.Do not use a heavy water stream.		
5.2. Special hazards arising from the subst	tance or mixture		
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	 Combustible liquid. No direct explosion hazard. Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases. 		
5.3. Advice for firefighters			
Firefighting instructions Protection during firefighting	 Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. 		

SECTION 6: Accidental release n	heasures
6.1. Personal precautions, protective	e equipment and emergency procedures
General measures	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
6.1.1. For non-emergency personnel	
Protective equipment Emergency procedures	Wear recommended personal protective equipment.Ventilate spillage area.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	Evacuate unnecessary personnel. Stop leak if safe to do so.
6.2. Environmental precautions	
Avoid release to the environment.	
6.3 Mothods and material for contai	nmont and cleaning up

For containment	: Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to
Methods for cleaning up	prevent migration and entry into sewers or streams. Stop leak without risks if possible. : Take up liquid spill into absorbent material.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	

For further information refer to section 13.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Precautions for safe handling Hygiene measures	 Provide good ventilation in process area to prevent formation of vapour. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, including a	any incompatibilities
Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Keep container closed when not in use. Keep in a cool, well-ventilated place away from heat.
Storage temperature	: 0 – 40 °C
Packaging materials	: Store always product in container of same material as original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Enersynth FE 0W-16

EU - Indicative Occupational Exposure Limit (IOEL)

Exposure limits/standards for materials that can be formed when handling this product. When mists/aerosols can occur the following is recommended 5 mg/m³ - ACGIH TLV (inhalable fraction).

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Eye protection			
Туре	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	≥ 0.35		EN ISO 374

Other skin protection

Materials for protective clothing:

Wear suitable protective clothing

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Phy	sical and chemica	I properties
		pioportioo

Physical state Colour Odour Odour threshold Melting point Freezing point Boiling point Flammability Explosive properties Lower explosion limit Upper explosion limit Upper explosion limit Flash point Auto-ignition temperature Decomposition temperature pH Viscosity, kinematic Solubility Partition coefficient n-octanol/water (Log Kow) Vapour pressure	 Liquid brown. characteristic. Not available Not applicable -39 °C - ASTM D5950 (pour point) Not available Not available Not applicable Presents no particular fire or explosion hazard. Not available Not available 224 °C - ASTM D92 (COC) Not available
Partition coefficient n-octanol/water (Log Kow) Vapour pressure	: Not available : Not available
Relative density Relative vapour density at 20°C	 i Not available i 0,845 kg/l (15 °C) - ASTM D4052 i Not available i Not available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Particle characteristics	: Not applicable
9.2. Other information	
9.2.1. Information with regard to phys No additional information available	ical hazard classes
9.2.2. Other safety characteristics	
VOC content	: 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts violently with (strong) oxidizers.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No decomposition if stored normally.

SECTION 11: Toxicological information

Ad A. Information on boundaries	a sea define ed in Demulation (EQ) No. 4070/0000
11.1. Information on nazard classe	s as defined in Regulation (EC) No 1272/2008

Acute toxicity (dermal)	Not classified Not classified Not classified
Distillates (petroleum), hydrotreated heavy pa	araffinic (64742-54-7)
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 5,53 mg/l/4h
Blend of mineral oils *	
LD50 oral rat	> 5000 mg/kg Data from similar product
LD50 dermal rabbit	> 5000 mg/kg Data from similar product
LC50 Inhalation - Rat (Dust/Mist)	> 5 mg/l/4h Data from similar product
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
STOT-single exposure :	Not classified

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

	Not classified Not classified	
Enersynth FE 0W-16		
Viscosity, kinematic	37,4 mm²/s (40 °C) - ASTM D7042	
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)		
Viscosity, kinematic	< 20,5 mm²/s	
Aliphatic, alicyclic or aromatic hydrocarbon Yes		
Blend of mineral oils *		
Viscosity, kinematic	< 20,5 mm²/s	
Aliphatic, alicyclic or aromatic hydrocarbon	Yes	
11.2. Information on other hazards		

No additional information available

SECTION 12: Ecological information		
12.1. Toxicity		
Hazardous to the aquatic environment, short–term : (acute)	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Not classified Not classified	
Distillates (petroleum), hydrotreated heavy pa	araffinic (64742-54-7)	
LC50 - Fish [1]	> 100 mg/l (Pimephales promelas, 96h) (OECD 203 method)	
EC50 - Crustacea [1]	> 10000 mg/l (Gammarus pulex, 48h) (OECD 202 method)	
EC50 72h - Algae [1]	> 100 mg/l	
NOEC (acute)	≥ 100 mg/l (Pseudokirchnerella subcapitata, 72h) (OECD 201 method)	
NOEC chronic crustacea	10 mg/l (Daphnia magna, 21d) (OECD 211 method)	
Blend of mineral oils *		
LC50 - Fish [1]	> 100 mg/l Data from similar product	
EC50 - Crustacea [1]	> 10000 mg/l Data from similar product	
EC50 72h - Algae [1]	> 100 mg/l Data from similar product	
NOEC chronic crustacea	> 10 mg/l	
NOEC chronic algae	> 10 mg/l (Water flea (Daphnia magna), 21 d)	
12.2. Persistence and degradability		

Enersynth FE 0W-16		
Persistence and degradability	Rapidly degradable	
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)		
Persistence and degradability	Not rapidly degradable	
Biodegradation	31 % (28d) (OECD 301F method)	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Blend of mineral oils * Persistence and degradability Not rapidly degradable 12.3. Bioaccumulative potential No additional information available 12.4. Mobility in soil No additional information available 12.5. Results of PBT and vPvB assessment No additional information available
12.3. Bioaccumulative potential No additional information available 12.4. Mobility in soil No additional information available 12.5. Results of PBT and vPvB assessment No additional information available
No additional information available 12.4. Mobility in soil No additional information available 12.5. Results of PBT and vPvB assessment No additional information available
12.4. Mobility in soil No additional information available 12.5. Results of PBT and vPvB assessment No additional information available
No additional information available 12.5. Results of PBT and vPvB assessment No additional information available
12.5. Results of PBT and vPvB assessment No additional information available
No additional information available
12.6. Endocrine disrupting properties
No additional information available
12.7. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation Waste treatment methods	 Disposal must be done according to official regulations. Do not allow into drains or water courses. Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations Product/Packaging disposal recommendations	 Disposal must be done according to official regulations. Dispose in a safe manner in accordance with local/national regulations.
Additional information European List of Waste (LoW, EC 2000/532)	 Do not re-use empty containers. 13 02 05* - mineral-based non-chlorinated engine, gear and lubricating oils

SECTION 14: Transport information

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

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID nu	ımber		,	
Not regulated for transport				
14.2. UN proper shipping	name			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions to

Overland transport Not regulated

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Transport by sea

Not regulated

Air transport Not regulated

Inland waterway transport Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

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

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)
-----------------------	---------------------------

Reference code	Applicable on	Entry title or description
3(b)	Distillates (petroleum), hydrotreated heavy paraffinic ; Blend of mineral oils *	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

VOC Directive (2004/42)

VOC content

: 0 %

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes				
Section	Changed item	Change	Comments	
	Supersedes	Modified		
	Revision date	Modified		
1.2	Main use category	Modified		
4.1	First-aid measures general	Added		
4.2	Symptoms/effects after eye contact	Added		
4.2	Symptoms/effects after inhalation	Added		
4.2	Symptoms/effects after ingestion	Added		
4.2	Symptoms/effects after skin contact	Added		
5.2	Explosion hazard	Added		
5.2	Hazardous decomposition products in case of fire	Modified		
5.3	Firefighting instructions	Added		
6.1	Emergency procedures	Added		
6.1	Protective equipment	Added		
6.1	General measures	Added		
6.3	For containment	Added		
7.1	Additional hazards when processed	Added		
7.2	Packaging materials	Added		
7.2	Technical measures	Added		
8.2	Personal protective equipment	Added		
10.3	Possibility of hazardous reactions	Modified		
13.1	Additional information	Added		
13.1	H code	Added		
13.1	Sewage disposal recommendations	Added		
13.1	Regional waste regulation	Added		

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:		
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:		
Asp. Tox. 1	Aspiration hazard, Category 1	
EUH210	Safety data sheet available on request.	
H304	May be fatal if swallowed and enters airways.	

Safety Data Sheet (SDS), EU

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.