

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form	: Mixture
Trade name	: VatOil LHM Plus
UFI	: 3DE0-J03H-2003-V371
Product code	: VG.30.01
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**

Intended for general public	
Main use category	: Industrial use, Professional use, Consumer use
Use of the substance/mixture	: Hydraulic oil

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

VatOil
Dollegoorweg 15
7602 EC Almelo - Netherlands
T 0031 (0)546 81 81 65
vib@vatoil.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+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) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0344 892 0111	

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Aspiration hazard, Category 1	H304
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412
Full text of H- and EUH-statements: see section 16	

Adverse physicochemical, human health and environmental effects

May be fatal if swallowed and enters airways. Harmful to aquatic life with long lasting effects.

VatOil LHM Plus

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

2.2. Label elements

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

Hazard pictograms (CLP)



GHS08

Signal word (CLP)

: Danger

Contains

: Distillates (petroleum), hydrotreated light paraffinic; Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics; Gas oils (petroleum), hydrodesulfurized

Hazard statements (CLP)

: H304 - May be fatal if swallowed and enters airways.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP)

: P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P273 - Avoid release to the environment.
P301+P310+P331 - IF SWALLOWED: Immediately call a doctor. Do NOT induce vomiting.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

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 light paraffinic (Note L)	(CAS-No.) 64742-55-8 (EC-No.) 265-158-7 (EC Index-No.) 649-468-00-3 (REACH-no) 01-2119487077-29	25 – 50	Asp. Tox. 1, H304
Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics	(EC-No.) 934-954-2 (REACH-no) 01-2119826592-36	25 – 50	Asp. Tox. 1, H304
Gas oils (petroleum), hydrodesulfurized	(CAS-No.) 64742-79-6 (EC-No.) 265-182-8 (EC Index-No.) 649-222-00-5 (REACH-no) 01-2119471311-49	5 – 10	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
2,6-di-tert-butylphenol	(CAS-No.) 128-39-2 (EC-No.) 204-884-0 (REACH-no) 01-2119490822-33	0,1 – 1	Skin Irrit. 2, H315 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Tris(methylphenyl) phosphate	(CAS-No.) 1330-78-5 (EC-No.) 215-548-8 (REACH-no) 01-2119531335-46	0,1 – 1	Repr. 2, H361f Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410

VatOil LHM Plus

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Phenol, dodecyl-, branched	(CAS-No.) 121158-58-5 (EC-No.) 310-154-3 (EC Index-No.) 604-092-00-9 (REACH-no) 01-2119513207-49	< 0,1	Repr. 1B, H360F Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)
naphthalene substance with national workplace exposure limit(s) (GB, IE); substance with a Community workplace exposure limit	(CAS-No.) 91-20-3 (EC-No.) 202-049-5 (EC Index-No.) 601-052-00-2 (REACH-no) 01-2119561346-37	< 0,1	Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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

Note L: The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of 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 : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : No irritant effect. Wash skin with plenty of water.
First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Rinse eyes with water as a precaution.
First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after ingestion : Risk of lung oedema.

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 : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

VatOil LHM Plus

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. 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

See Heading 7. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.
Storage temperature : < 40 °C

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

VatOil LHM Plus	
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/m ³ - ACGIH TLV (inhalable fraction).

naphthalene (91-20-3)

EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Naphthalene
IOEL TWA	50 mg/m ³
Notes	(Year of adoption 2010)
Regulatory reference	COMMISSION DIRECTIVE 91/322/EEC; SCOEL Recommendations
Ireland - Occupational Exposure Limits	
Local name	Naphthalene
OEL TWA [1]	50 mg/m ³
OEL TWA [2]	10 ppm

VatOil LHM Plus

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

naphthalene (91-20-3)	
Notes (IE)	IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2020
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	50 mg/m ³

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 symbol(s):



8.2.2.1. Eye and face protection

Eye protection:			
Safety glasses			
Type	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:					
Hand protection : skin cream may be used. waterproof gloves. PVC gloves. Nitrile rubber gloves					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	≥ 0.35		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

VatOil LHM Plus

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Device	Filter type	Condition	Standard
	Type A - High-boiling (>65 °C) organic compounds, Type P2	If conc. in air > exposure limit	EN 14387

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: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Green.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: -51 °C - ASTM D5950 (pour point)
Boiling point	: No data available
Flash point	: 105 °C - ASTM D93 (PM)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: 0,1 hPa (20°C)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0,847 g/cm ³ (15 °C) - ASTM D4052
Solubility	: Water : Material nearly insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: 18 mm ² /s (40 °C) - ASTM D7279
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Lower explosive limit (LEL)	: 0,5 vol %
Upper explosive limit (UEL)	: 5 vol %

9.2. Other information

No additional information available

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

No dangerous reactions known. Reacts violently with (strong) oxidizers.

10.4. Conditions to avoid

No decomposition if stored normally.

VatOil LHM Plus

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	5,53 mg/l/4h

Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics

LD50 oral rat	> 5000 mg/kg (OECD 401 method)
LD50 dermal rabbit	> 3160 mg/kg (OECD 402 method)
LC50 Inhalation - Rat (Dust/Mist)	> 5,266 mg/l/4h (OECD 403 method)

2,6-di-tert-butylphenol (128-39-2)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Gas oils (petroleum), hydrodesulfurized (64742-79-6)

LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401 method)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (OECD 402 method)
LC50 Inhalation - Rat	1 – 5 mg/l
LC50 Inhalation - Rat (Dust/Mist)	> 4,6 mg/l/4h (OECD 403 method)

naphthalene (91-20-3)

LD50 oral rat	> 533 mg/kg
LD50 dermal rat	> 2000 mg/kg

Tris(methylphenyl) phosphate (1330-78-5)

LD50 oral rat	> 3700 mg/kg
LD50 dermal rabbit	> 10000 mg/kg
LC50 Inhalation - Rat	> 11,1 mg/l (aerosol, 1h)

Phenol, dodecyl-, branched (121158-58-5)

LD50 oral rat	2100 mg/kg (OECD 401 method)
---------------	------------------------------

VatOil LHM Plus

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

LD50 dermal rabbit	15000 mg/kg (OECD 402 method)
--------------------	-------------------------------

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

STOT-repeated exposure : Not classified

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)

LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
----------------------------	---

Aspiration hazard : May be fatal if swallowed and enters airways.

VatOil LHM Plus

Viscosity, kinematic	18 mm ² /s (40 °C) - ASTM D7279
----------------------	--

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)

LC50 - Fish [1]	> 100 mg/l 96h
EC50 - Crustacea [1]	> 1000 mg/l
NOEC chronic fish	1000 mg/l 14d
NOEC chronic crustacea	10 mg/l 21d
NOEC chronic algae	≥ 100 mg/l 72h

Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics

LC50 - Fish [1]	> 1028 mg/l (Scophthalmus maximus, 96h) [OECD 203]
EC50 - Crustacea [1]	> 3193 mg/l (Acartia tonsa, 48h) [ISO 14669]
EC50 72h - Algae [1]	> 10000 mg/l (Skeletonema costatum, 72h) [ISO 10253]
NOEC chronic fish	> 1000 mg/l (Oncorhynchus mykiss - QSAR Petrotox, 28d)
NOEC chronic crustacea	> 1000 mg/l (Daphnia magna - QSAR Petrotox, 21d)

2,6-di-tert-butylphenol (128-39-2)

EC50 - Crustacea [1]	0,45 mg/l (Daphnia magna, freshwater, 48h)
EC50 72h - Algae [1]	1,4 mg/l (Selenastrum capricornutum, freshwater)

VatOil LHM Plus

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Gas oils (petroleum), hydrodesulfurized (64742-79-6)	
LC50 - Fish [1]	21 mg/l (OECD 203 method)
EC50 - Crustacea [1]	7385 mg/l
ErC50 algae	1 – 10 mg/l

naphthalene (91-20-3)	
LC50 - Fish [1]	0,51 mg/l 96h
EC50 - Crustacea [1]	3,4 mg/l Daphnia magna - 48h

Tris(methylphenyl) phosphate (1330-78-5)	
LC50 - Fish [1]	0,6 mg/l
EC50 - Crustacea [1]	14 µg/l (Daphnia magna, 48h)
EC50 72h - Algae [1]	0,4 mg/l (Desmodesmus subspicatus, 72h)
NOEC (chronic)	0,01 mg/l (Jordanella floridae, 28d)

Phenol, dodecyl-, branched (121158-58-5)	
LC50 - Fish [1]	40 mg/l (Pimephales promelas, 96h) (OECD 203 method)
EC50 - Crustacea [1]	0,037 mg/l (Daphnia magna, 48h) (OECD 202 method)
EC50 72h - Algae [1]	0,36 mg/l (Desmodesmus subspicatus, 72h) (OECD 201 method)
NOEC (chronic)	0,0037 mg/l (Daphnia magna, 21d) (OECD 211 method)

12.2. Persistence and degradability

VatOil LHM Plus	
Persistence and degradability	Readily biodegradable.

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
Persistence and degradability	Not established.
Biodegradation	31 % (OECD 301F method)

2,6-di-tert-butylphenol (128-39-2)	
Biodegradation	5 % Sturm (28 d)

Tris(methylphenyl) phosphate (1330-78-5)	
Biodegradation	80 % (28d) (OECD 301C method)

Phenol, dodecyl-, branched (121158-58-5)	
Biodegradation	25 % Sturm (28 d)

12.3. Bioaccumulative potential

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
Partition coefficient n-octanol/water (Log Pow)	> 6
Bioaccumulative potential	Not established.

VatOil LHM Plus

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

2,6-di-tert-butylphenol (128-39-2)

Partition coefficient n-octanol/water (Log Kow)	4,5 Octanol/water (0,1 d)
---	---------------------------

naphthalene (91-20-3)

Partition coefficient n-octanol/water (Log Pow)	3,01
---	------

Tris(methylphenyl) phosphate (1330-78-5)

Partition coefficient n-octanol/water (Log Pow)	5,93
---	------

Phenol, dodecyl-, branched (121158-58-5)

BCF - Fish [1]	794,33
Bioconcentration factor (BCF REACH)	2,9 (27 d)
Partition coefficient n-octanol/water (Log Pow)	7,1
Partition coefficient n-octanol/water (Log Kow)	7,1 Octanol-water coefficient (0.1 d)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	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

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
European List of Waste (LoW) code : 13 01 10* - mineral based non-chlorinated hydraulic oils

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

VatOil LHM Plus

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

14.5. Environmental hazards

Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

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 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

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Child-resistant fastening : Applicable

Tactile warning : Applicable

15.1.2. National regulations

No additional information available

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	
3	Composition/information on ingredients	Modified	

VatOil LHM Plus

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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)
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
IATA	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
PBT	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:	
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4

VatOil LHM Plus

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.
H360F	May damage fertility.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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.