



LHM Fluid

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 26/02/2015 Revision date: 05/10/2018 Supersedes version of: 31/08/2015 Version: 3.3

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

1.1. Product identifier

Product form : Mixture
Name : LHM Fluid
UFI : KQGQ-64CG-0004-EG6V
Product code : 529
Article number : 52900

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

1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use, Consumer use
Industrial/Professional use spec : Non-dispersive use
Used in closed systems
Function or use category : Lubricants and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

BARDAHL NL - OCD NEDERLAND BV
Maxwellstraat 41
3316 GP Dordrecht
Nederland
T 0031 78 651 2322 - F 0031 78 617 4848
mjkooijman@bardahl.nl - www.bardahl.nl

1.4. Emergency telephone number

Emergency number : +31 (0) 6 54924171
During office hours: 8.30 t/m 17:00 h

Country	Official advisory body	Address	Emergency number	Comment
	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	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]

Aspiration hazard, Category 1 H304
Hazardous to the aquatic environment – Chronic Hazard, H412
Category 3

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

Adverse physicochemical, human health and environmental effects

No additional information available

LHM Fluid

Safety Data Sheet

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

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS08

Signal word (CLP) :

Danger

Hazard statements (CLP) :

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

Precautionary statements (CLP) :

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

EUH-statements :

EUH208 - Contains Phenol, isopropylated, phosphate (3:1)(68937-41-7). May produce an allergic reaction.

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ 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 is 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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Lubricating Oils (Petroleum) C15-30 100% hydrotreated neutral oil-based; Base Oil - unspecified (Note L)	CAS-No.: 72623-86-0 EC-No.: 276-737-9 EC Index-No.: 649-482-00-X REACH-no: 01-2119474878-16	50 – 100	Carc. 1B, H350
Mineral oil	CAS-No.: 8042-47-5 EC-No.: 232-455-8 REACH-no: 01-2119487078-27	25 – 50	Asp. Tox. 1, H304
2,6-di-tert-butyl-p-cresol	CAS-No.: 128-37-0 EC-No.: 204-881-4 REACH-no: 01-2119565113-46	0.1 – 1	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Phenol, isopropylated, phosphate (3:1)	CAS-No.: 68937-41-7 EC-No.: 273-066-3	0.1 – 1	Skin Sens. 1, H317 Repr. 2, H361 STOT RE 2, H373 Aquatic Chronic 2, H411

LHM Fluid

Safety Data Sheet

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

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 after inhalation : Call a POISON CENTER/doctor if you feel unwell. Allow affected person to breathe fresh air.

First-aid measures after skin contact : Wash skin thoroughly with mild soap and water.

First-aid measures after eye contact : Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart.

First-aid measures after ingestion : Do NOT induce vomiting. Rinse mouth. Obtain emergency medical attention.

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

Symptoms/effects after inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

Symptoms/effects after skin contact : Not expected to present a significant skin hazard under anticipated conditions of normal use.

Symptoms/effects after eye contact : Not expected to present a significant eye contact hazard under anticipated conditions of normal use.

Symptoms/effects after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

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

Ingestion of this product may lead to chemical pneumonia and even death.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water haze. Foam. Powder. Dry chemical.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Precautionary measures fire : Exercise caution when fighting any chemical fire.

Firefighting instructions : Use water spray or fog for cooling exposed containers.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing and gloves.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and gloves.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

LHM Fluid

Safety Data Sheet

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

6.3. Methods and material for containment and cleaning up

For containment	: Impound and recover large spill by mixing it with inert granular solids.
Methods for cleaning up	: Detergent. Take up liquid spill into absorbent material sand, saw dust, kieselguhr.
Other information	: May be dangerously slippery if spilled. Use suitable disposal containers.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Avoid all unnecessary exposure. Both local exhaust and general room ventilation are usually required.
Handling temperature	: < 40 °C
Hygiene measures	: 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 any incompatibilities

Storage conditions	: Store in dry, cool, well-ventilated area.
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

2,6-di-tert-butyl-p-cresol (128-37-0)	
United Kingdom - Occupational Exposure Limits	
Local name	2,6-di-tert-butyl-p-cresol
WEL TWA (OEL TWA) [1]	10 mg/m ³
WEL STEL (OEL STEL)	30 mg/m ³
Regulatory reference	EH40/2005 (Third edition, 2018). HSE

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

No additional information available

LHM Fluid

Safety Data Sheet

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

8.2.2. Personal protection equipment

Personal protective equipment:

Protective goggles. Gloves.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

No special clothing/skin protection equipment is recommended under normal conditions of use.

Hand protection:

Wear suitable gloves resistant to chemical penetration. Recommended thickness of the material: ≥ 0.35 mm. Penetration time of glove material: ≥ 480 min

8.2.2.3. Respiratory protection

Respiratory protection:

No special protection required where adequate ventilation is maintained.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Green.
Appearance	: Oily liquid.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: -55 °C
Boiling point	: > 200 °C
Flammability	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 125 °C (ASTM D92)
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 18 mm ² /s (40 °C)
Solubility	: Slightly soluble, the product remains on the water surface.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: 840 kg/m ³ (15 °C)
Relative density	: Not available
Relative vapour density at 20 °C	: Not available
Particle characteristics	: Not applicable

LHM Fluid

Safety Data Sheet

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

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong oxidizers. Acids. Bases.

10.6. Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

Mineral oil (8042-47-5)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg

2,6-di-tert-butyl-p-cresol (128-37-0)	
LD50 oral rat	> 2930 mg/kg (OECD 401)
LD50 dermal rat	> 2000 mg/kg (OECD 402)

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

Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

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

LHM Fluid

Safety Data Sheet

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

LHM Fluid

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

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) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

Mineral oil (8042-47-5)

LC50 - Fish [1]	> 100 mg/l 4d - Pimephales promelas
EC50 - Crustacea [1]	> 10000 mg/l
EC50 - Crustacea [2]	> 10 mg/l 21d
EC50 72h - Algae [1]	> 100 mg/l 3d - Chlorophyta
NOEC (chronic)	> 10 mg/l

2,6-di-tert-butyl-p-cresol (128-37-0)

LC50 - Fish [1]	> 0.57
EC50 - Crustacea [1]	0.61 mg/l
EC50 72h - Algae [1]	6 mg/l

12.2. Persistence and degradability

LHM Fluid

Persistence and degradability	Not soluble in water, so only minimally biodegradable.
Biodegradation	7.4 % Sturm (28d)

Mineral oil (8042-47-5)

Biodegradation	31 % 28d - OECD TG 301 B
----------------	--------------------------

12.3. Bioaccumulative potential

2,6-di-tert-butyl-p-cresol (128-37-0)

Partition coefficient n-octanol/water (Log Pow)	5.1
---	-----

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

LHM Fluid

Safety Data Sheet

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated for transport				
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
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. 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)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

LHM Fluid

Safety Data Sheet

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

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)

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

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
1.2	Function or use category	Modified	
3	Composition/information on ingredients	Modified	
8.2	Eye protection	Added	
8.2	Hand protection	Modified	

Abbreviations and acronyms:

Abbreviations and acronyms:

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

ICAO: International Civil Aviation Organization

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Full text of H- and EUH-statements:

Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1

LHM Fluid

Safety Data Sheet

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

Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1B	Carcinogenicity, Category 1B
EUH208	Contains Phenol, isopropylated, phosphate (3:1)(68937-41-7). May produce an allergic reaction.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H350	May cause cancer.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
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.
Repr. 2	Reproductive toxicity, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

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.