



SUBSTITUT DE PLOMB BARDAHL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Reference number: 1158
Issue date: 20-01-16 Revision date: 26-01-24 Supersedes version of: 12-12-22 Version: 5.1

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

1.1. Product identifier

Product form : Mixture
Product name : SUBSTITUT DE PLOMB BARDAHL
UFI : RP3F-1AU1-A30Q-HQMQ
Product code : 1158 # 738115R15
Type of product : Detergent

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 : Consumer use
Function or use category : Fuel additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Distributor

SADAPS BARDAHL Additives & Lubricants
ZI TOURNAI OUEST 2 - RUE DU MONT DES CARLIERS, 3
7522 TOURNAI
BELGIQUE
T +32 (0).69.59.03.60, F +32 (0).69.59.03.61
msds@bardahlfrance.com, www.bardahl.fr

Supplier

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msds@bardahlfrance.com, www.bardahl.fr

1.4. Emergency telephone number

Emergency number : + 32 (0)70.245.245 / +33 (0)1.45.42.59.59

Country/Area	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)	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital Msida MSD 2090 Msida	+356 2545 6508	
Saudi Arabia	Poison Control Center-Riyadh	General Directorate of Health Affairs Medial Province	+966 112324180 +966 112324189	
United Arab Emirates	Health Authority – Abu Dhabi (HAAD) Poison & Drug Information Center (PDIC)	P.O. Box 5674	+ 800-424	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Specific target organ toxicity – Repeated exposure, Category 2	H373
Aspiration hazard, Category 1	H304
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411
Full text of H- and EUH-statements: see section 16	

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)



GHS05

GHS08

GHS09

Signal word (CLP)

: Danger

Contains

: Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate; Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%); Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

Hazard statements (CLP)

: H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H373 - May cause damage to organs through prolonged or repeated exposure.
H411 - Toxic 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.
P260 - Do not breathe vapours.
P264 - Wash hands thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, eye protection, face protection.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor.
P331 - Do NOT induce vomiting.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER, a doctor.
P312 - Call a POISON CENTER, doctor if you feel unwell.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of contents/container to a hazardous or special waste collection point.

Child-resistant fastening

: Applicable

Tactile warning

: Applicable

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 %

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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]
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics substance with national workplace exposure limit(s) (FR)	CAS-No.: 64742-48-9 EC-No.: 918-481-9 REACH-no: 01-2119457273-39	60-80	Asp. Tox. 1, H304 EUH066
Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate	CAS-No.: 7491-09-0 EC-No.: 231-308-5 REACH-no: 01-2119919740-39	1-10	Skin Irrit. 2, H315 Eye Dam. 1, H318
2-éthylhexane-1-ol	CAS-No.: 104-76-7 EC-No.: 203-234-3 REACH-no: 01-2119487289-20	5-15	Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	EC-No.: 918-481-9 REACH-no: 01-2119457273-39	5-10	Asp. Tox. 1, H304 EUH066
Distillates (petroleum), hydrotreated light	CAS-No.: 64742-47-8 EC-No.: 265-149-8 EC Index-No.: 649-422-00-2	1-5	Flam. Liq. 3, H226 Asp. Tox. 1, H304
2,6-di-tert-butylphenol	CAS-No.: 128-39-2 EC-No.: 204-884-0 REACH-no: 01-2119490822-33	2-5	Skin Irrit. 2, H315 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Acute Tox. Not classified (Oral)
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	EC-No.: 919-164-8 REACH-no: 01-2119473977-17	1-3	STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
2-ethylhexan-1-ol substance with national workplace exposure limit(s) (AT, BE, DE, DK, ES, FI, FR, GB, IE, LV, PL, RO, SE); substance with a Community workplace exposure limit	CAS-No.: 104-76-7 EC-No.: 203-234-3 REACH-no: 01-2119487289-20	1-3	Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
diphenylamine substance with national workplace exposure limit(s) (FR, GB, IE)	CAS-No.: 122-39-4 EC-No.: 204-539-4 EC Index-No.: 612-026-00-5 REACH-no: 01-2119488966-13	<0,1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Eye Irrit. 2, H319 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
naphthalene substance with national workplace exposure limit(s) (AT, BE, DE, DK, ES, FI, FR, GB, HU, IE, IT, LV, NL, PL, RO, SE); substance with a Community workplace exposure limit	CAS-No.: 91-20-3 EC-No.: 202-049-5	<0,1	Flam. Sol. 2, H228 Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If medical advice is needed, have product container or label at hand.
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: Remove contaminated clothes. Wash skin with plenty of water. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

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

Symptoms/effects after inhalation	: May be fatal if swallowed and enters airways.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways.

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

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.
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5.3. Advice for firefighters

Firefighting instructions	: Exercise caution when fighting any chemical fire.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	: Prevent liquid from entering sewers, watercourses, underground or low areas.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Evacuate area. Eliminate every possible source of ignition. Ensure adequate ventilation, especially in confined areas. Keep public away from danger area. Equip cleanup crew with proper protection.
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6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Dike for recovery or absorb with appropriate material. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Recover the product with absorbent material.
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Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer to section 13 : "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not eat, drink or smoke when using this product.
Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Provide local exhaust or general room ventilation.
Storage conditions : Store in a closed container. Keep out of frost.
Heat and ignition sources : Keep away from naked flames/heat. Keep away from ignition sources.
Storage area : Store in a dry place. Store in a well-ventilated place.
Special rules on packaging : Store in original container.

Switzerland

Storage class (LK) : LK 6.1 - Toxic materials

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-ethylhexan-1-ol (104-76-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	2-ethylhexan-1-ol
IOEL TWA	5,4 mg/m ³
	1 ppm
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	5,4 mg/m ³
	1 ppm
MAK (OEL STEL)	10,8 mg/m ³
	2 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	5,4 mg/m ³
	1 ppm
Denmark - Occupational Exposure Limits	
OEL TWA	5,4 mg/m ³
	1
OEL STEL	10,8 mg/m ³

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2-ethylhexan-1-ol (104-76-7)	
	2 ppm
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	5,4 mg/m ³
	1 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	5,4 mg/m ³
	1 ppm
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	54 mg/m ³
	10 ppm
Ireland - Occupational Exposure Limits	
OEL TWA	5,4 mg/m ³
	1 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	5,4 mg/m ³
	1 ppm
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	5,4 mg/m ³
NDSP (OEL C)	10,8 mg/m ³
Romania - Occupational Exposure Limits	
OEL TWA	5,4 mg/m ³
	1 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	5,4 mg/m ³
	1 ppm
VLA-EC (OEL STEL)	110 mg/m ³
	20 ppm
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	5,4 mg/m ³
	1 ppm
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	5,4 mg/m ³
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	5,4 mg/m ³
	1 ppm
KZGW (OEL STEL)	10,8 mg/m ³
	2 ppm

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diphenylamine (122-39-4)	
France - Occupational Exposure Limits	
VME (OEL TWA)	10 mg/m ³
Ireland - Occupational Exposure Limits	
OEL TWA	10 mg/m ³
OEL STEL	20 mg/m ³
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	10 mg/m ³
WEL STEL (OEL STEL)	20 mg/m ³
naphthalene (91-20-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	50 mg/m ³
	10 ppm
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	50 mg/m ³
	10 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	53 mg/m ³
	10 ppm
OEL STEL	80 mg/m ³
	15 ppm
Denmark - Occupational Exposure Limits	
OEL TWA	50 mg/m ³
	10 ppm
OEL STEL	100 mg/m ³
	20 ppm
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	5 mg/m ³
	1 ppm
HTP (OEL STEL)	10 mg/m ³
	2 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	50 mg/m ³
	10 ppm
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	2 mg/m ³
	0,4 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	50 mg/m ³

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naphthalene (91-20-3)	
Ireland - Occupational Exposure Limits	
OEL TWA	50 mg/m ³
	10 ppm
Italy - Occupational Exposure Limits	
OEL TWA	50 mg/m ³
	10 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	50 mg/m ³
	10 ppm
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	50 mg/m ³
TGG-15min (OEL STEL)	80 mg/m ³
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	20 mg/m ³
NDSch (OEL STEL)	50 mg/m ³
Romania - Occupational Exposure Limits	
OEL TWA	50 mg/m ³
	9,5 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	53 mg/m ³
	10 ppm
VLA-EC (OEL STEL)	80 mg/m ³
	15 ppm
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	50 mg/m ³
	10 ppm
KTV (OEL STEL)	80 mg/m ³
	15 ppm
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	53 mg/m ³
	10 ppm
WEL STEL (OEL STEL)	80 mg/m ³
	15 ppm
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	50 mg/m ³
	10 ppm
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	50 mg/m ³
	10 ppm

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Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-48-9)

France - Occupational Exposure Limits

VME (OEL TWA)	1200 mg/m ³
	184 ppm

Norway - Occupational Exposure Limits

Grenseverdi (OEL TWA)	275 mg/m ³
	50 ppm

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

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses. ISO 16321-1. Wear eye protection

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Gloves. ISO 374-1. Wear protective gloves

Hand protection

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	>0,55		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

Good ventilation of the workplace required

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: red.
Appearance	: clear.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 63 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: < 20,5 mm²/s
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 0,807 – 0,822 g/cm³ (20°C)
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

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

Stable under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Heat. Open flame. Sparks. Water, humidity. Freezing.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

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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

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

LD50 oral rat	1320 mg/kg
LD50 dermal rabbit	10 g/kg

2-ethylhexan-1-ol (104-76-7)

LD50 oral rat	> 3290 mg/kg
LD50 dermal rabbit	> 3000 mg/kg

diphenylamine (122-39-4)

LD50 oral rat	100 mg/kg
LD50 dermal rabbit	300 mg/kg

Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified (64742-94-5)

LD50 dermal rabbit	> 2 ml/kg
LC50 Inhalation - Rat	> 590 mg/m ³

naphthalene (91-20-3)

LD50 oral rat	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat	> 0,4 mg/l air

2-éthylhexane-1-ol (104-76-7)

LD50 oral rat	2047 mg/kg
LD50 dermal rat	> 3000 mg/kg (OCDE ligne directrice 402)
LC50 Inhalation - Rat	0,89 mg/l/4h (OCDE ligne directrice 403)

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-48-9)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat	4951 mg/m ³ 4 hours

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

naphthalene (91-20-3)

LOAEL (animal/female, F0/P)	50 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:OECD Guideline 414 (Prenatal Developmental Toxicity Study)
LOAEL (animal/female, F1)	450 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:OECD Guideline 414 (Prenatal Developmental Toxicity Study)
NOAEL (animal/female, F0/P)	120 mg/kg bodyweight Animal: rabbit, Animal sex: female, Guideline: other:OECD Guideline 414 (Prenatal Developmental Toxicity Study)

STOT-single exposure : Not classified

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2-ethylhexan-1-ol (104-76-7)	
STOT-single exposure	May cause respiratory irritation.
Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified (64742-94-5)	
STOT-single exposure	May cause drowsiness or dizziness.
2-éthylhexane-1-ol (104-76-7)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
diphenylamine (122-39-4)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
naphthalene (91-20-3)	
LOAEL (oral, rat, 90 days)	400 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
LOAEC (inhalation, rat, vapour, 90 days)	0,011 mg/l air Animal: rat, Guideline: EPA OPP 82-4 (90-Day Inhalation Toxicity), Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEL (dermal, rat/rabbit, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
2-éthylhexane-1-ol (104-76-7)	
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0,6384 mg/l
Aspiration hazard	: May be fatal if swallowed and enters airways.
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Viscosity, kinematic	< 20,5 mm²/s
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-48-9)	
Viscosity, kinematic	1,3 mm²/s

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic 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) : Toxic to aquatic life with long lasting effects.

2,6-di-tert-butylphenol (128-39-2)	
LC50 - Fish [1]	1,4 mg/l (Fathead Minnow, 4 d)
LC50 - Fish [2]	13 mg/l (Rainbow Trout, 4 d)
EC50 - Crustacea [1]	0,45 – 0,8 mg/l (Water flea (Daphnia magna), 2 d)
EC50 72h - Algae [1]	3,6 mg/l (Green algae (Selenastrum capricornutum), 3 d)

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Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	
EC50 - Other aquatic organisms [1]	> 1000 mg/l (Water Flea (Daphnia Magna))
EC50 72h - Algae [1]	> 1000 mg/l (Pseudokirchneriella subcapitata)
2-ethylhexan-1-ol (104-76-7)	
LC50 - Fish [1]	28,2 mg/l (Pimephales promelas, 4DY)
EC50 - Crustacea [1]	39 mg/l (Daphnia magna)
EC50 72h - Algae [1]	16,6 mg/l (Scenedesmus quadricauda)
diphenylamine (122-39-4)	
LC50 - Fish [1]	2,2 mg/l
EC50 - Crustacea [1]	0,31 mg/l (Daphnia magna)
EC50 72h - Algae [1]	1,51 mg/l (Selenastrum capricornutum)
Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate (7491-09-0)	
LC50 - Fish [1]	27,2 mg/l (Truite arc-en-ciel)
EC50 - Crustacea [1]	6,6 mg/l (Daphnia magna)
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	
LC50 - Fish [1]	10,01 – 100 mg/l (Oncorhynchus mykiss)
EC50 - Crustacea [1]	100,01 – 200 mg/l (Daphnia magna)
EC50 72h - Algae [1]	10,01 – 100 mg/l (Pseudokirchneriella subcapitata)
NOEC chronic algae	3 mg/l
Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified (64742-94-5)	
LC50 - Fish [1]	2 – 5 mg/l
EC50 - Crustacea [1]	3 – 10 mg/l
EC50 72h - Algae [1]	< 10 mg/l
(tetrapropenyl)succinic acid (27859-58-1)	
LC50 - Fish [1]	> 100 mg/l (Truite arc-en-ciel)
EC50 - Crustacea [1]	> 100 mg/l (Daphnia magna)
EC50 96h - Algae [1]	100 mg/l (Pseudokirchneriella subcapitata)
naphthalene (91-20-3)	
LC50 - Fish [2]	48 hours
EC50 - Crustacea [1]	2,16 mg/l
NOEC (chronic)	0,59 mg/l
NOEC chronic fish	≈ 0,37 mg/l
2-éthylhexane-1-ol (104-76-7)	
LC50 - Fish [1]	17,1 mg/l (Leuciscus idus melanotus)
EC50 - Crustacea [1]	39 mg/l (Daphnia (Daphnie))
EC50 72h - Algae [1]	11,5 mg/l (Desmodesmus subspicatus)
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-48-9)	
LC50 - Fish [1]	> 1000 mg/l

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Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-48-9)	
EC50 - Crustacea [1]	> 1000 mg/l Daphnia Magna
EC50 72h - Algae [1]	> 1000 mg/l Pseudokirchnerella subcapitata
NOEC chronic algae	1000 mg/l Pseudokirchnerella subcapitata
12.2. Persistence and degradability	
SUBSTITUT DE PLOMB BARDAHL	
Persistence and degradability	Rapidly degradable
2,6-di-tert-butylphenol (128-39-2)	
Persistence and degradability	Not readily biodegradable.
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	
Persistence and degradability	Readily biodegradable.
2-ethylhexan-1-ol (104-76-7)	
Persistence and degradability	Rapidly degradable
diphenylamine (122-39-4)	
Persistence and degradability	Rapidly degradable
Biodegradation	26 % (28d) (OCDE 301D method)
Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate (7491-09-0)	
Persistence and degradability	Readily biodegradable.
Distillates (petroleum), hydrotreated light (64742-47-8)	
Persistence and degradability	Rapidly degradable
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	
Persistence and degradability	Readily biodegradable.
Biodegradation	66,7 % 28 days
Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified (64742-94-5)	
Persistence and degradability	Rapidly degradable
(tetrapropenyl)succinic acid (27859-58-1)	
Persistence and degradability	Rapidly degradable
Biodegradation	18,3 % 28 days
naphthalene (91-20-3)	
Persistence and degradability	Rapidly degradable
2-éthylhexane-1-ol (104-76-7)	
Persistence and degradability	Readily biodegradable.
Biodegradation	79 – 99,9 %
1-[[4-[(diméthylphényl)azo]diméthylphényl]azo]-2-naphtol (1320-06-5)	
Persistence and degradability	Rapidly degradable
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-48-9)	
Persistence and degradability	Rapidly degradable

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Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-48-9)

Biodegradation	80 % 28 days
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Persistence and degradability	Rapidly degradable
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12.3. Bioaccumulative potential

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

Partition coefficient n-octanol/water (Log Pow)	4,5
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2-ethylhexan-1-ol (104-76-7)

Partition coefficient n-octanol/water (Log Pow)	2,9 (measured)
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diphenylamine (122-39-4)

Partition coefficient n-octanol/water (Log Pow)	3,4 (calculé)
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Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate (7491-09-0)

Partition coefficient n-octanol/water (Log Pow)	1,98
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2-éthylhexane-1-ol (104-76-7)

Partition coefficient n-octanol/water (Log Pow)	2,9 (OCDE ligne directrice 117)
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12.4. Mobility in soil

2-ethylhexan-1-ol (104-76-7)

Mobility in soil	-1,42
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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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Sewage disposal recommendations	: Do not discharge into drains or the environment.
Product/Packaging disposal recommendations	: Collect all waste in suitable and labelled containers and dispose according to local legislation.
Additional information	: Empty the packaging completely prior to disposal. Do not re-use empty containers.
Ecological information	: Do not discharge the product into the environment.

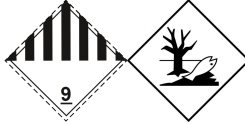
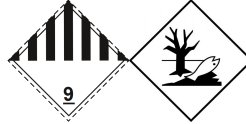
SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

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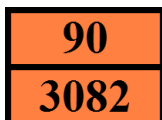
according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description			
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : 2,6-di-tert-butylphenol ; diphenylamine), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : 2,6-di-tert-butylphenol ; diphenylamine), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (CONTAINS : 2,6-di-tert-butylphenol ; diphenylamine), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : 2,6-di-tert-butylphenol ; diphenylamine), 9, III
14.3. Transport hazard class(es)			
9	9	9	9
			
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available			

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	:



Tunnel restriction code (ADR)	: -
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EAC code : •3Z

Transport by sea

Special provisions (IMDG) : 274, 335, 969
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : LP01, P001
Special packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1, TP29
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Stowage category (IMDG) : A

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L
Special provisions (IATA) : A97, A158, A197, A215
ERG code (IATA) : 9L

Rail transport

Classification code (RID) : M6
Special provisions (RID) : 274, 335, 375, 601
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1
Packing instructions (RID) : P001, IBC03, LP01, R001
Special packing provisions (RID) : PP1
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions (RID) : TP1, TP29
Tank codes for RID tanks (RID) : LGBV
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW31
Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 90

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
3(a)	Distillates (petroleum), hydrotreated light

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EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(b)	SUBSTITUT DE PLOMB BARDAHL ; 2,6-di-tert-butylphenol ; Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics ; 2-ethylhexan-1-ol ; Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate ; Distillates (petroleum), hydrotreated light ; Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) ; 2-éthylhexane-1-ol ; Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics
3(c)	SUBSTITUT DE PLOMB BARDAHL ; 2,6-di-tert-butylphenol ; Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
40.	Distillates (petroleum), hydrotreated light ; naphthalene

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 substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals): Diphenylamine (122-39-4)

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.

Detergent Regulation (648/2004)

Labelling of contents	
Component	%
aliphatic hydrocarbons	≥30%
aromatic hydrocarbons	<5%

Seveso Directive (Disaster Risk Reduction)

Seveso III Part I (Categories of dangerous substances)	Qualifying quantity (tonnes)	
	Lower-tier	Upper-tier
E2 Hazardous to the Aquatic Environment in Category Chronic 2	200	500

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)

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15.1.2. National regulations

France

Occupational diseases	
Code	Description
RG 49	Skin disorders caused by aliphatic, alicyclic amines or ethanolamines
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

Germany

Employment restrictions	: Observe restrictions according Act on the Protection of Working Mothers (MuSchG). Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).
Water hazard class (WGK)	: WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen	: Distillates (petroleum), hydrotreated light is listed
SZW-lijst van mutagene stoffen	: Distillates (petroleum), hydrotreated light is listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	: None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid	: None of the components are listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling	: None of the components are listed

Denmark

Class for fire hazard	: Class III-1
Store unit	: 50 liter
Classification remarks	: Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed
Danish National Regulations	: Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Acute Tox. Not classified (Oral)	Acute toxicity (oral) Not classified
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 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3

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Full text of H- and EUH-statements:	
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
EUH066	Repeated exposure may cause skin dryness or cracking.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Flam. Sol. 2	Flammable solids, Category 2
H226	Flammable liquid and vapour.
H228	Flammable solid.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
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.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

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.