B2 CURATIVE OIL ADDITIVE BARDAHL

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
SDS Reference Number: 1001
Issue date: 12-05-17 Revision date: 13-12-24 Supersedes version of: 16-05-23 Version: 2.0

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

1.1. Product identifier

Product form : Mixture
Product name : B2 CURATIVE OIL ADDITIVE BARDAHL
Product code : 1001 # 731100R4
Type of product : Lubricants and additives

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 : Lubricants and 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.be

Supplier
SADAPS BARDAHL Additives & Lubricants
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BELGIQUE
T +32 (0).69.59.03.60, F +32 (0).69.59.03.61
msds@bardahlfrance.com, www.bardahl.be

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	112 +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	

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

No additional information available

2.2. Label elements

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

Precautionary statements (CLP) : P102 - Keep out of reach of children.
Child-resistant fastening : Not applicable
Tactile warning : Not applicable

2.3. Other hazards

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

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)(¹), Zinc bis(O,O-diisooctyl) bis(dithiophosphate) (28629-66-5)(¹), Distillates (petroleum), hydrotreated heavy paraffinic(¹), Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)(¹), Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (93819-94-4)(¹), long chain alkyl thio carbamide metal complex(¹)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)(¹), Zinc bis(O,O-diisooctyl) bis(dithiophosphate) (28629-66-5)(¹), Distillates (petroleum), hydrotreated heavy paraffinic(¹), Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)(¹), Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (93819-94-4)(¹), long chain alkyl thio carbamide metal complex(¹)

(¹) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

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

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated light paraffinic substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, LT, LV, NL, PL, RO, SE, SI, SK); substance with a Community workplace exposure limit	CAS-No.: 64742-55-8 EC-No.: 265-158-7 REACH-no: 01-2119487077-29	30-40	Asp. Tox. 1, H304
Distillates (petroleum), hydrotreated light paraffinic substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, LT, LV, NL, PL, RO, SE, SI, SK); substance with a Community workplace exposure limit	CAS-No.: 64742-54-7 EC-No.: 265-157-1 REACH-no: 01-2119484627-25	30-40	Not classified

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 : 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

No additional information available

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. 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.

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. Spill area may be slippery. Keep public away from danger area. Equip cleanup crew with proper protection.

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.

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it.

Other information : Spill area may be slippery.

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.

Information on mixed storage : Keep away from food, drink and animal feeding stuffs.

Storage area : Store in a well-ventilated place. Store in a dry place.

Special rules on packaging : Store in original container.

Switzerland

Storage class (LK) : LK 10/12 - Liquids

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/m³
	1 ppm
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	5,4 mg/m³
	1 ppm
MAK (OEL STEL)	10,8 mg/m³
	2 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	5,4 mg/m³
	1 ppm
Denmark - Occupational Exposure Limits	
OEL TWA	5,4 mg/m³
	1 ppm
OEL STEL	10,8 mg/m³
	2 ppm
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	5,4 mg/m³
	1 ppm

2-ethylhexan-1-ol (104-76-7)	
France - Occupational Exposure Limits	
VME (OEL TWA)	5,4 mg/m³
	1 ppm
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	54 mg/m³
	10 ppm
Ireland - Occupational Exposure Limits	
OEL TWA	5,4 mg/m³
	1 ppm
Italy - Occupational Exposure Limits	
OEL TWA	5,4 mg/m³
	1 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	5,4 mg/m³
	1 ppm
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	5,4 mg/m³
NDSP (OEL C)	10,8 mg/m³
Romania - Occupational Exposure Limits	
OEL TWA	5,4 mg/m³
	1 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	5,4 mg/m³
	1 ppm
VLA-EC (OEL STEL)	110 mg/m³
	20 ppm
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	5,4 mg/m³
	1 ppm
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	5,4 mg/m³
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	5,4 mg/m³
	1 ppm
Korttidsverdi (OEL STEL)	54 mg/m³
	10 ppm
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	5,4 mg/m³
	1 ppm

2-ethylhexan-1-ol (104-76-7)	
KZGW (OEL STEL)	10,8 mg/m³
	2 ppm

mineral oil	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m³

Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m³

Distillates (petroleum), hydrotreated heavy paraffinic	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5,4 mg/m³
	1 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	5,4 mg/m³
	1 ppm

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m³ 8h
IOEL STEL	10 mg/m³ 15min
Belgium - Occupational Exposure Limits	
OEL TWA	5 mg/m³ 8h, mist (Belgium, 5/2021)
OEL STEL	10 mg/m³ 15min, mist (Belgium, 5/2021)
Bulgaria - Occupational Exposure Limits	
OEL TWA	5 mg/m³ 8h ; Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgarie, 6/2021).
Croatia - Occupational Exposure Limits	
GVI (OEL TWA)	5 mg/m³
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	5 mg/m³ 8h; aerosol ; Government regulation of Czech Republic PEL/NPK-P (République Tchèque, 5/2021).
NPK-P (OEL C)	10 mg/m³ 15min; aerosol ; Government regulation of Czech Republic PEL/NPK-P (République Tchèque, 5/2021).
Denmark - Occupational Exposure Limits	
OEL TWA	1 mg/m³ 8 h; mist and particles; Working Environment Authority (Danemark, 11/2021).
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	5 mg/m³ 8h ; mist ; Institute of Occupational Health, Ministry of Social Affairs (Finlande, 10/2021).
France - Occupational Exposure Limits	
VME (OEL TWA)	5 mg/m³

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
VLE (OEL C/STEL)	10 mg/m³
Greece - Occupational Exposure Limits	
OEL TWA	5 mg/m³ 8h; mist; Ministry of Labour and Social Affairs (Grèce, 9/2021).
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	5 mg/m³ 8h; mist; 5/2020. (II. 6.) ITM Decree (Hongrie, 2/2020).
Ireland - Occupational Exposure Limits	
OEL TWA	5 ppm 8h; particulates; NAOSH (Irlande, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs)
Latvia - Occupational Exposure Limits	
OEL TWA	5 mg/m³ 8h; Ministers Cabinet Regulations Nr.325 - AER (Lettonie, 2/2021).
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	1 mg/m³ 8h; mist; Lithuanian Hygiene Standard HN 23 (Lituanie, 1/2021).
TPRV (OEL STEL)	3 mg/m³ 15min; mist; Lithuanian Hygiene Standard HN 23 (Lituanie, 1/2021).
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	5 mg/m³ 8h; mist; Ministry of Social Affairs and Employment, Legal limit values (Pays-Bas, 7/2021).
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	5 mg/m³
Portugal - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Romania - Occupational Exposure Limits	
OEL TWA	5 mg/m³ 8h; HG 1218/2006 with subsequent modifications and additions (Roumanie, 3/2021).
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA)	1 mg/m³ (mineral oils); 8h; liquid aerosol, fumes; Government regulation SR c. 355/2006 (Slovaquie, 9/2020).
NPHV (OEL STEL)	5 mg/m³ (mineral oils); 15min; liquid aerosol, fumes; Government regulation SR c. 355/2006 (Slovaquie, 9/2020).
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	1 mg/m³ 8h; mist and fumes; Work environment authority Regulation 2018:1 (Suède, 9/2021).
KGV (OEL STEL)	3 mg/m³ 15min; mist and fumes; Work environment authority Regulation 2018:1 (Suède, 9/2021).
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	5 mg/m³
WEL STEL (OEL STEL)	10 mg/m³
Iceland - Occupational Exposure Limits	
OEL TWA	1 mg/m³ 8h; particulates; Ministry of Welfare, List of Exposure Limits (Islande, 5/2021).
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	5 mg/m³

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m³
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	5 mg/m³
Belgium - Occupational Exposure Limits	
OEL TWA	5 mg/m³
OEL STEL	10 mg/m³
Bulgaria - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Croatia - Occupational Exposure Limits	
GVI (OEL TWA)	5 mg/m³
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	5 mg/m³
NPK-P (OEL C)	10 mg/m³
Denmark - Occupational Exposure Limits	
OEL TWA	1 mg/m³
Estonia - Occupational Exposure Limits	
OEL TWA	3 mg/m³
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	5 mg/m³
France - Occupational Exposure Limits	
VME (OEL TWA)	5 mg/m³
Germany - Occupational Exposure Limits (TRGS 552)	
Concentration limits	5 mg/m³
Greece - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	5 mg/m³
Ireland - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Latvia - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	1 mg/m³
TPRV (OEL STEL)	3 mg/m³
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	5 mg/m³
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	5 mg/m³

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
Romania - Occupational Exposure Limits	
OEL TWA	5 mg/m³
OEL STEL	10 mg/m³
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA)	1 mg/m³
	5 ppm
NPHV (OEL STEL)	3 mg/m³
	15 ppm
Slovenia - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	5 mg/m³
VLA-EC (OEL STEL)	10 mg/m³
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	1 mg/m³
KGV (OEL STEL)	3 mg/m³
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	5 mg/m³
Iceland - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	1 mg/m³
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	5 mg/m³
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	5 mg/m³
ACGIH OEL STEL	10 mg/m³

Distillates (petroleum), hydrotreated light paraffinic (64742-54-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m³
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	5 mg/m³
Belgium - Occupational Exposure Limits	
OEL TWA	5 mg/m³
OEL STEL	10 mg/m³
Bulgaria - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Croatia - Occupational Exposure Limits	
GVI (OEL TWA)	5 mg/m³

Distillates (petroleum), hydrotreated light paraffinic (64742-54-7)	
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	5 mg/m³
NPK-P (OEL C)	10 mg/m³
Denmark - Occupational Exposure Limits	
OEL TWA	1 mg/m³
Estonia - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	5 mg/m³
France - Occupational Exposure Limits	
VME (OEL TWA)	5 mg/m³
Germany - Occupational Exposure Limits (TRGS 552)	
Concentration limits	5 mg/m³
Greece - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	5 mg/m³
Ireland - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Latvia - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	1 mg/m³
TPRV (OEL STEL)	3 mg/m³
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	5 mg/m³
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	5 mg/m³
Romania - Occupational Exposure Limits	
OEL TWA	5 mg/m³
OEL STEL	10 mg/m³
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA)	1 mg/m³
	5 ppm
NPHV (OEL STEL)	3 mg/m³
	15 ppm
Slovenia - Occupational Exposure Limits	
OEL TWA	5 mg/m³

Distillates (petroleum), hydrotreated light paraffinic (64742-54-7)	
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	5 mg/m³
VLA-EC (OEL STEL)	10 mg/m³
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	1 mg/m³
KGV (OEL STEL)	3 mg/m³
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	5 mg/m³
Iceland - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	1 mg/m³
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	5 mg/m³
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	5 mg/m³
ACGIH OEL STEL	10 mg/m³

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

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Yellow.
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	:	> 60 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	> 20,5 mm²/s (40°C)
Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	0,851 – 0,871 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.

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-ethylhexan-1-ol (104-76-7)	
LD50 oral rat	2500 mg/kg
LD50 dermal rabbit	2500 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	1,5 mg/l/4h
LC50 Inhalation - Rat (Vapours)	11 mg/l/4h

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)	
LD50 oral rat	3100 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg bodyweight

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

Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	5,53 mg/l/4h

Zinc bis(O,O-diisooctyl) bis(dithiophosphate) (28629-66-5)	
LD50 oral rat	3760 mg/kg (OCDE 401)
LD50 dermal rabbit	> 5000 (OCDE 402)

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401)
LD50 dermal rabbit	> 5000 mg/kg bodyweight (OECD 402)
LC50 Inhalation - Rat (Vapours)	> 5,53 mg/l/4h (OECD 403)

Paraffin oils (petroleum), catalytic dewaxed heavy (64742-70-7)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg

C14-16-18 Alkyl phenol	
LD50 oral rat	> 2000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bw/day

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat (Vapours)	> 5,53 mg/l/4h

Distillates (petroleum), hydrotreated light paraffinic (64742-54-7)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat (Vapours)	> 5,53 mg/l/4h

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

2-ethylhexan-1-ol (104-76-7)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

triphenyl phosphite (101-02-0)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day
NOAEL (subchronic, oral, animal/male, 90 days)	≥ 2000 mg/kg bodyweight
NOAEL (subchronic, oral, animal/female, 90 days)	≥ 2000 mg/kg bodyweight

C14-16-18 Alkyl phenol	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

B2 CURATIVE OIL ADDITIVE BARDAHL	
Viscosity, kinematic	> 20,5 mm²/s (40°C)

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

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) : Not classified

2-ethylhexan-1-ol (104-76-7)	
LC50 - Fish [1]	28,2 mg/l (Pimephales promelas, 4DY)
LC50 - Fish [2]	17,1 mg/l (Ide mélanote (Leuciscus idus), 4DY)
EC50 - Crustacea [1]	1,82 mg/l (48h)
EC50 - Crustacea [2]	2,72 mg/l (24h)
EC50 - Other aquatic organisms [1]	39 mg/l (Cladocère, 2DY)
EC50 72h - Algae [1]	16,6 mg/l Scenedesmus subspicatus
EC50 72h - Algae [2]	11,5 mg/l Desmodesmus subspicatus
EC50 96h - Algae [1]	1,3 mg/l Skeletonema costatum
NOEC chronic fish	14 mg/l (Ide mélanote (Leuciscus idus), 4DY)

triphenyl phosphite (101-02-0)	
EC50 - Crustacea [1]	0,94 mg/l (Daphnia magna)

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)	
LC50 - Fish [1]	4,4 mg/l Oncorhynchus mykiss
EC50 - Crustacea [1]	75 mg/l Daphnia magna ; 2 days
EC50 72h - Algae [1]	410 mg/l Scenedesmus quadricauda ; 3 days
NOEC chronic crustacea	0,4 mg/l (Daphnia magna), 21 d
NOEC chronic algae	220 mg/l Scenedesmus quadricauda; 3 days

mineral oil	
LC50 - Fish [1]	> 100 mg/l (Pimephales promelas)
EC50 - Crustacea [1]	> 10000 mg/l (Daphnia magma)
EC50 72h - Algae [1]	> 100 mg/l (Scenedesmus quadricauda)
NOEC chronic crustacea	> 10 mg/l (Daphnia magma) ; 21 days

Zinc bis(O,O-diisooctyl) bis(dithiophosphate) (28629-66-5)	
LC50 - Fish [1]	3,8 mg/l Oncorhynchus mykiss (Rainbow trout)
EC50 - Crustacea [1]	510 mg/l Daphnia magna (Water flea)
EC50 72h - Algae [1]	240 mg/l Desmodesmus subspicatus

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
LC50 - Fish [1]	> 100 mg/l (Pimephales promelas)
EC50 - Crustacea [1]	> 10000 mg/l (Daphnia magna)
NOEC chronic fish	1000 mg/l (Oncorhynchus mykiss) - 14 days
NOEC chronic crustacea	10 mg/l (Daphnia magna) - 21 days
NOEC chronic algae	> 100 mg/l (Pseudokirchneriella subcapitata) - 72 days

Paraffin oils (petroleum), catalytic dewaxed heavy (64742-70-7)	
LC50 - Fish [1]	> 100 mg/l
EC50 - Crustacea [1]	> 10000 mg/l
EC50 72h - Algae [1]	> 100 mg/l

C14-16-18 Alkyl phenol	
LC50 - Fish [1]	> 1000 mg/l

C14-16-18 Alkyl phenol	
EC50 - Crustacea [1]	> 1000 mg/l
EC50 72h - Algae [1]	≥ 1000 mg/l

long chain alkyl thio carbamide metal complex	
LC50 - Fish [1]	94,8 mg/l (Oncorhynchus mykiss - OECD 203)
EC50 - Crustacea [1]	50 mg/l (Daphnia magna - OECD 202)
EC50 72h - Algae [1]	14 mg/l (Selenastrum capricornutum - OECD 201)
EC50 72h - Algae [2]	9,62 mg/l (Pseudokirchneriella subcapitata - OCDE 201)
NOEC chronic crustacea	100 mg/l

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
EC50 - Crustacea [1]	> 10000 mg/l

Distillates (petroleum), hydrotreated light paraffinic (64742-54-7)	
EC50 - Crustacea [1]	> 10000 mg/l

12.2. Persistence and degradability

B2 CURATIVE OIL ADDITIVE BARDAHL	
Persistence and degradability	Rapidly degradable

Paraffin oils (petroleum), catalytic dewaxed heavy (64742-70-7)	
Persistence and degradability	Rapidly degradable

huile minérale	
Persistence and degradability	Rapidly degradable

2-ethylhexan-1-ol (104-76-7)	
Persistence and degradability	Readily biodegradable.
Biodegradation	95 % (OECD TG 302 B), 100% (OECD TG 301 C)

triphenyl phosphite (101-02-0)	
Persistence and degradability	Rapidly degradable
Biodegradation	0,14 % OECD TG 301 D

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)	
Persistence and degradability	Not readily biodegradable, (OECD 301D method), <5 % biodegradation 28 days.

mineral oil	
Persistence and degradability	Not readily biodegradable, (OECD 301B method), 31 % biodegradation 28 days.

Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)	
Persistence and degradability	Rapidly degradable

Zinc bis(O,O-diisooctyl) bis(dithiophosphate) (28629-66-5)	
Persistence and degradability	Not readily biodegradable.

Distillates (petroleum), hydrotreated heavy paraffinic	
Persistence and degradability	Rapidly degradable

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	31 % (28 d OECD 301F)

Paraffin oils (petroleum), catalytic dewaxed heavy (64742-70-7)	
Persistence and degradability	Rapidly degradable

C14-16-18 Alkyl phenol	
Persistence and degradability	Rapidly degradable

Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (93819-94-4)	
Persistence and degradability	Rapidly degradable

long chain alkyl thio carbamide metal complex	
Persistence and degradability	Not readily biodegradable.
Biodegradation	22,75 % (OCDE 301)

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
Persistence and degradability	Rapidly degradable
Biodegradation	31 % OECD 301F

Distillates (petroleum), hydrotreated light paraffinic (64742-54-7)	
Persistence and degradability	Rapidly degradable
Biodegradation	31 %

12.3. Bioaccumulative potential

2-ethylhexan-1-ol (104-76-7)	
Bioconcentration factor (BCF REACH)	25,35
Partition coefficient n-octanol/water (Log Kow)	2,9

triphenyl phosphite (101-02-0)	
Partition coefficient n-octanol/water (Log Kow)	6,62 (25°C)

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)	
Partition coefficient n-octanol/water (Log Kow)	3,6

Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)	
Partition coefficient n-octanol/water (Log Pow)	> 3

Zinc bis(O,O-diisooctyl) bis(dithiophosphate) (28629-66-5)	
Partition coefficient n-octanol/water (Log Pow)	2,87 (20°C)
Bioaccumulative potential	Does not significantly accumulate in organisms.

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
Bioconcentration factor (BCF REACH)	260
Partition coefficient n-octanol/water (Log Pow)	9,2

C14-16-18 Alkyl phenol	
Partition coefficient n-octanol/water (Log Pow)	> 7,2

long chain alkyl thio carbamide metal complex	
BCF - Fish [1]	0,05 mg/l Cyprinus carpio
Bioconcentration factor (BCF REACH)	88 (OCDE 305)
Partition coefficient n-octanol/water (Log Pow)	5,1

12.4. Mobility in soil

2-ethylhexan-1-ol (104-76-7)	
Mobility in soil	-1,42

Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)	
Ecology - soil	insoluble in water.

Zinc bis(O,O-diisooctyl) bis(dithiophosphate) (28629-66-5)	
Mobility in soil	immobile

long chain alkyl thio carbamide metal complex	
Mobility in soil	Après libération, est absorbé par le sol.

12.5. Results of PBT and vPvB assessment

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)(¹), Zinc bis(O,O-diisooctyl) bis(dithiophosphate) (28629-66-5)(¹), Distillates (petroleum), hydrotreated heavy paraffinic(¹), Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)(¹), Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (93819-94-4)(¹), long chain alkyl thio carbamide metal complex(¹)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)(¹), Zinc bis(O,O-diisooctyl) bis(dithiophosphate) (28629-66-5)(¹), Distillates (petroleum), hydrotreated heavy paraffinic(¹), Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)(¹), Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (93819-94-4)(¹), long chain alkyl thio carbamide metal complex(¹)

(¹) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

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 waste information : Do not discharge the product into the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

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

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air 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)

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

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)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

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

France

Occupational diseases	
Code	Description
RG 36	Diseases caused by oils and fats of mineral or synthetic origin
RG 59	Occupational poisoning by hexane
RG 65	Eczematiform lesions of allergic mechanism

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 to the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : Distillates (petroleum), hydrotreated light paraffinic,Distillates (petroleum), hydrotreated light paraffinic are listed

SZW-lijst van mutagene stoffen : Distillates (petroleum), hydrotreated light paraffinic,Distillates (petroleum), hydrotreated light paraffinic are 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

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Pregnant/breastfeeding women working with the product must not be in direct contact with the product

Poland

Polish National Regulations	:	Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225). Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797). The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended). Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923). Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154). Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended). The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488) Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended). Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141). ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891)

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Asp. Tox. 1	Aspiration hazard, Category 1
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.