MANUAL GEARBOX ADDITIVE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Reference number: 1045B
Issue date: 24-09-14 Revision date: 11-05-26 Supersedes version of: 05-09-25 Version: 5.0

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

1.1. Product identifier

Product form : Mixture
Product name : MANUAL GEARBOX ADDITIVE
UFI : XD07-A6KM-KD9F-4RYQ
Product code : 1045B # 715104BR5
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
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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	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]

Serious eye damage/eye irritation, Category 2	H319
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) :



GHS07 GHS09

Signal word (CLP) : Warning

Hazard statements (CLP) : H319 - Causes serious eye irritation.
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.
P264 - Wash hands thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, eye protection, face protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P391 - Collect spillage.
P501 - Dispose of contents/container to a hazardous or special waste collection point.

EUH-statements : EUH208 - Contains triphenyl phosphite, methyl methacrylate. May produce an allergic reaction.

Child-resistant fastening : Not applicable

Tactile warning : Not applicable

2.3. Other hazards

Contains PBT substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)	PBT: not yet assessed vPvB: not yet assessed
triphenyl phosphite (101-02-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII vPvB: not yet assessed
O,O,O-triphenyl phosphorothioate (597-82-0)	This substance meets the PBT criteria of REACH regulation, annex XIII vPvB: not yet assessed

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 %

Component	
O,O,O-triphenyl phosphorothioate (597-82-0)	The substance is not 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

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]
Distillates (petroleum), hydrotreated heavy paraffinic substance with national workplace exposure limit(s) (BE); substance with a Community workplace exposure limit (Note L)	CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: 01-2119484627-25	35-50	Asp. Tox. 1, H304
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	CAS-No.: 4259-15-8 EC-No.: 224-235-5 REACH-no: 01-2119493635-27	5-10	Eye Dam. 1, H318 Aquatic Chronic 2, H411
Distillates (petroleum), hydrotreated light paraffinic substance with national workplace exposure limit(s) (FR) (Note L)	CAS-No.: 64742-55-8 EC-No.: 265-158-7 EC Index-No.: 649-468-00-3 REACH-no: 01-2119487077-29	5-10	Asp. Tox. 1, H304
mineral oil substance with a Community workplace exposure limit (Note L)	-	<3	Asp. Tox. 1, H304
triphenyl phosphite	CAS-No.: 101-02-0 EC-No.: 202-908-4 EC Index-No.: 015-105-00-7 REACH-no: 01-2119511213-58	<1	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410
O,O,O-triphenyl phosphorothioate substance listed on REACH Candidate List PBT substance	CAS-No.: 597-82-0 EC-No.: 209-909-9 REACH-no: 01-2119979545-21	>0,1 - <1	Aquatic Chronic 1, H410 (M=10)
methyl methacrylate 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 (Note D)	CAS-No.: 80-62-6 EC-No.: 201-297-1 EC Index-No.: 607-035-00-6 REACH-no: 01-2119452498-28	<1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1B, H317 STOT SE 3, H335

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	CAS-No.: 4259-15-8 EC-No.: 224-235-5 REACH-no: 01-2119493635-27	(50 ≤ C < 100) Eye Dam. 1; H318

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits**
triphenyl phosphite	CAS-No.: 101-02-0 EC-No.: 202-908-4 EC Index-No.: 015-105-00-7 REACH-no: 01-2119511213-58	(5 ≤ C < 100) Skin Irrit. 2; H315 (5 ≤ C < 100) Eye Irrit. 2; H319

Note D - Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'.
Note L - The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide extract as measured by IP 346 ("Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions – Dimethyl sulphoxide extraction refractive index method" Institute of Petroleum, London), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.
Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : 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 skin contact : May produce an allergic reaction.

Symptoms/effects after eye contact : Causes serious eye irritation.

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.

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.

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.

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.

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

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m³ 8H
Belgium - Occupational Exposure Limits	
OEL TWA	5 mg/m³

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
France - Occupational Exposure Limits	
VLEP 8h (OEL TWA)	1200 mg/m³

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

methyl methacrylate (80-62-6)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	50 ppm
IOEL STEL	100 ppm
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	210 mg/m³
	50 ppm
MAK (OEL STEL)	420 mg/m³
	100 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	208 mg/m³
	50 ppm
OEL STEL	416 mg/m³
	100 ppm
Denmark - Occupational Exposure Limits	
8-timers grænseværdi (OEL TWA)	102
	25
Korttidsgrænseværdi (OEL STEL)	204
	50 ppm
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	42 mg/m³
	10 ppm
HTP (OEL STEL)	210 mg/m³
	50 ppm
France - Occupational Exposure Limits	
VLEP 8h (OEL TWA)	205 mg/m³
	50 ppm
VLEP CT (OEL STEL)	410 mg/m³
	100 ppm
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	210 mg/m³
	50

methyl methacrylate (80-62-6)	
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	210 mg/m³
CK (OEL STEL)	210 mg/m³
Ireland - Occupational Exposure Limits	
OEL TWA	50
OEL STEL	100 ppm
Italy - Occupational Exposure Limits	
OEL TWA	50 ppm
OEL STEL	100 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	10 mg/m³
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	205 mg/m³
TGG-15min (OEL STEL)	410 mg/m³
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	100 mg/m³
NDSCh (OEL STEL)	300 mg/m³
Romania - Occupational Exposure Limits	
OEL TWA	205 mg/m³
	50 ppm
OEL STEL	410 mg/m³
	100 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	100 mg/m³
	50 ppm
VLA-EC (OEL STEL)	416 mg/m³
	100 ppm
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	200 mg/m³
	50 ppm
KGV (OEL STEL)	400 mg/m³
	100 ppm
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	208 mg/m³
	50 ppm
WEL STEL (OEL STEL)	416 mg/m³
	100 ppm
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	210 mg/m³

methyl methacrylate (80-62-6)	
	50 ppm
KZGW (OEL STEL)	420 mg/m³
	100 ppm
USA - ACGIH® - Threshold Limit Values	
ACGIH® TLV® TWA	410 mg/m³
	100 ppm

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	
Local name	2-Ethylhexan-1-ol # Ethylhexaan-1-ol
OEL TWA	5,4 mg/m³
	1 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023
Denmark - Occupational Exposure Limits	
8-timers grænseværdi (OEL TWA)	5,4 mg/m³
	1 ppm
Korttidsgrænseværdi (OEL STEL)	10,8 mg/m³
	2 ppm
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	5,4 mg/m³
	1 ppm
France - Occupational Exposure Limits	
Local name	2-Ethylhexan-1-ol
VLEP 8h (OEL TWA)	5,4 mg/m³
	1 ppm
Remark	Valeurs réglementaires indicatives
Regulatory reference	Arrêté du 30 juin 2004 modifié (réf.: INRS ED 6443, 2022; Outil65; Arrête du 27 septembre 2019)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	54 mg/m³

2-ethylhexan-1-ol (104-76-7)	
	10 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	5,4 mg/m³
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
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	5,4 mg/m³
	1 ppm
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	5,4 mg/m³
	1 ppm
NDSCh (OEL STEL)	10,8 mg/m³
	2 ppm
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
	1 ppm
WEL STEL (OEL STEL)*	16,2 mg/m³
	3 ppm
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	5,4 mg/m³
	1 ppm

2-ethylhexan-1-ol (104-76-7)	
Korttidsverdi (OEL STEL)	54 mg/m³
	10 ppm
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	5,4 mg/m³
	1 ppm
KZGW (OEL STEL)	10,8 mg/m³
	2 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

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Gloves. ISO 374-1

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
Explosive limits	:	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	:	69,5 – 84,95 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	:	0,882 – 0,902 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

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LD50 oral rat	> 5000 mg/kg OCDE 420
LD50 dermal rabbit	> 2000 mg/kg OCDE 402
LC50 Inhalation - Rat	> 5,53 mg/l/4h OCDE 403

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

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	5,53 mg/l/4h

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

triphenyl phosphite (101-02-0)	
LD50 dermal rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: other:

2-ethylhexan-1-ol (104-76-7)	
LD50 oral rat	≈ 2047 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 3000 mg/kg (OECD 402 method)
LC50 Inhalation - Rat	0,89 – 5,3 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

O,O,O-triphenyl phosphorothioate (597-82-0)	
LD50 oral rat	> 10000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))

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

2-ethylhexan-1-ol (104-76-7)	
NOAEL (chronic, oral, animal/male, 2 years)	500 mg/kg bodyweight (OECD 451 method)
NOAEL (chronic, oral, animal/female, 2 years)	500 mg/kg bodyweight (OECD 451 method)

Reproductive toxicity : Not classified

O,O,O-triphenyl phosphorothioate (597-82-0)	
NOAEL (animal/male, F0/P)	300 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test), Guideline: other:
NOAEL (animal/female, F0/P)	1000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test), Guideline: other:
NOAEL (animal/male, F1)	300 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test), Guideline: other:
NOAEL (animal/female, F1)	1000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test), Guideline: other:

STOT-single exposure : Not classified

methyl methacrylate (80-62-6)	
STOT-single exposure	May cause respiratory irritation.

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

STOT-repeated exposure : Not classified

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

triphenyl phosphite (101-02-0)	
NOAEL (oral, rat, 90 days)	15 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

2-ethylhexan-1-ol (104-76-7)	
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, gas, 90 days)	120 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

Aspiration hazard : Not classified

MANUAL GEARBOX ADDITIVE	
Viscosity, kinematic	69,5 – 84,95 mm²/s (40°C)

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.

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LC50 - Fish [1]	> 100 mg/l Pimephales promelas - OCDE 203
EC50 - Crustacea [1]	> 10000 mg/l Gammarus pulex - OCDE 202

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
EC50 - Crustacea [2]	> 10000 mg/l Daphnia magna - OCDE 202
EC50 72h - Algae [1]	≥ 100 mg/l (Pseudokirchnerella subcapitata, 72h) (méthode OCDE 201)
ErC50 algae	> 100 mg/l
NOEC chronic crustacea	10 mg/l Daphnia magna 21d - OCDE 211

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

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
LC50 - Fish [1]	> 100 mg/l
EC50 - Crustacea [1]	> 1000 mg/l
EC50 72h - Algae [1]	> 100 mg/l
NOEC chronic fish	1000 mg/l 14d
NOEC chronic crustacea	10 mg/l 21d
NOEC chronic algae	≥ 100 mg/l 72h

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

triphenyl phosphite (101-02-0)	
LC50 - Fish [1]	> 12 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	0,94 mg/l (Daphnia magna)

2-ethylhexan-1-ol (104-76-7)	
LC50 - Fish [1]	17,1 mg/l Test organisms (species): Leuciscus idus melanotus
LC50 - Fish [2]	28,2 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	39 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	11,5 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	16,6 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

O,O,O-triphenyl phosphorothioate (597-82-0)	
LC50 - Fish [1]	> 100 mg/l OCDE 203
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
ErC50 algae	> 100 mg/l OCDE 201
NOEC chronic fish	0,0017 mg/l 97d

O,O,O-triphenyl phosphorothioate (597-82-0)	
NOEC chronic crustacea	> 0,000724 mg/l 21d (Daphnia magna)

12.2. Persistence and degradability

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Biodegradation	31 % (28d) OCDE 301F

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.

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

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

triphenyl phosphite (101-02-0)	
Biodegradation	0,14 % OECD TG 301 D

O,O,O-triphenyl phosphorothioate (597-82-0)	
Biodegradation	19,3 % 29d

12.3. Bioaccumulative potential

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

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

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

2-ethylhexan-1-ol (104-76-7)	
Partition coefficient n-octanol/water (Log Kow)	2,9 (OECD 117 method)

12.4. Mobility in soil

2-ethylhexan-1-ol (104-76-7)	
Surface tension	47 mN/m (OECD 115 method)

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.

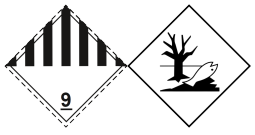
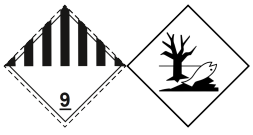
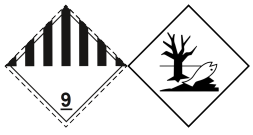
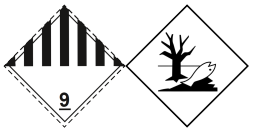
Product/Packaging disposal recommendations : Collect all waste in suitable and labelled containers and dispose according to local legislation.

Additional information : Empty the packaging completely prior to disposal. Do not re-use empty containers.

Ecological 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			
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 O,O,O-triphenyl phosphorothioate ; Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains O,O,O-triphenyl phosphorothioate ; Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (contains O,O,O-triphenyl phosphorothioate ; Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains O,O,O-triphenyl phosphorothioate ; Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)), 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, 650

Limited quantities (ADR)	:	5l
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)	:	-
EAC code	:	•3Z

Transport by sea

Special provisions (IMDG)	:	274, 335, 375, 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, 650
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)

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 substance(s) listed on the REACH Candidate List in concentrations ≥ 0.1 % or SCL: O,O,O-triphenyl phosphorothioate (EC 209-909-9, CAS 597-82-0)

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)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)
Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

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 (EU 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 (EC 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

Austria

Ordinance on Flammable Liquids (VbF) : Auto detect

France

Occupational diseases	
Code	Description
RG 36	Diseases caused by oils and fats of mineral or synthetic origin
RG 65	Eczematiform lesions of allergic mechanism
RG 82	Conditions caused by methyl methacrylate

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 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).

Override matching entry (12. BImSchV) : Is not subject to the Major Accidents Ordinance (12. BImSchV)

Netherlands

SZW List of Carcinogenic Substances : Distillates (petroleum), hydrotreated heavy paraffinic,Distillates (petroleum), hydrotreated light paraffinic are listed

SZW List of Mutagenic Substances : Distillates (petroleum), hydrotreated heavy paraffinic,Distillates (petroleum), hydrotreated light paraffinic are listed

SZW List of Reprotoxic Substances – Breastfeeding : None of the components are listed

SZW List of Reprotoxic Substances – Fertility : None of the components are listed

SZW List of Reprotoxic Substances – Development : 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 it.
If an employee is pregnant or breastfeeding and the person in question uses or is exposed to this product at work, the employer must always carry out a risk assessment of the work. The assessment must both deal with the dangerousness of the impact and its strength and duration. The employer's decision that a pregnant or lactating woman can perform a specific work task must therefore be made in the context of her specific working conditions. See also WEA-Guideline A.1.8-7 on the working environment of pregnant and breastfeeding workers.

Switzerland

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

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2

Full text of H- and EUH-statements:	
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
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
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
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.
EUH208	Contains triphenyl phosphite, methyl methacrylate. May produce an allergic reaction.

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.