

Safety Data Sheet

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

Reference number: 9357B Issue date: 13-01-20 Revision date: 01-02-22 Supersedes version of: 05-02-20 Version: 2.0

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

1.1. Product identifier

Product form : Mixture

Product name : 5 IN 1 CLEANER DIESEL BARDAHL

Product code : 9357B # 737935BR1

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

: Consumer use Main use category : Fuel additives Function or use category

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

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

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 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 Abu Dhabi	+ 800-424	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

Safety Data Sheet

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aspiration hazard, Category 1 H304

Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412

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

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)

GHS08

Signal word (CLP) : Danger

Contains : Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

Hazard statements (CLP) : H304 - May be fatal if swallowed and enters airways.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P262 - Do not get in eyes, on skin, or on clothing.

P273 - Avoid release to the environment.

P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor.

P331 - Do NOT induce vomiting.

P405 - Store locked up.

P501 - Dispose of contents/container to a hazardous or special waste collection point.

EUH-statements : EUH066 - Repeated exposure may cause skin dryness or cracking.

Child-resistant fastening : Applicable Tactile warning : Applicable

2.3. Other hazards

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

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	80-100	Asp. Tox. 1, H304 EUH066

Safety Data Sheet

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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-ethylhexyl nitrate substance with a Community workplace exposure limit	CAS-No.: 27247-96-7 EC-No.: 248-363-6 REACH-no: 01-2119539586- 27	1-5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Aquatic Chronic 2, H411 (M=0) EUH044, EUH066
1,1'-Bis-(ferrocenyl)octane	EC-No.: 479-710-1	<0.3	Repr. 1B, H360FD STOT RE 2, H373 Aquatic Chronic 4, H413
2-ethylhexan-1-ol substance with national workplace exposure limit(s) (AT, BE, DE, DK, ES, FI, FR, GB, IE, IT, 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	<0.5	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
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 EC Index-No.: 601-052-00-2	<0.1	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

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 : Repeated exposure may cause skin dryness or cracking.

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

Explosion hazard : Risk of explosion if heated under confinement.

Hazardous decomposition products in case of fire : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other

toxic gases.

Safety Data Sheet

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

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

Additional hazards when processed : Risk of explosion if heated under confinement.

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

01-02-22 (Revision date) EN (English) 4/16

Safety Data Sheet

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

2-ethylhexyl nitrate (27247-96-7)			
EU - Indicative Occupational Exposure Limit (IOEL)			
IOEL TWA [ppm]	1 ppm		
2-ethylhexan-1-ol (104-76-7)			
EU - Indicative Occupational Exposure Limit (IOEL)	EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	2-ethylhexan-1-ol		
IOEL TWA	5,4 mg/m³		
IOEL TWA [ppm]	1 ppm		
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164		
Austria - Occupational Exposure Limits			
MAK (OEL TWA)	5,4 mg/m³		
MAK (OEL TWA) [ppm]	1 ppm		
MAK (OEL STEL)	10,8 mg/m³		
MAK (OEL STEL) [ppm]	2 ppm		
Belgium - Occupational Exposure Limits			
OEL TWA	5,4 mg/m³		
OEL TWA [ppm]	1 ppm		
Denmark - Occupational Exposure Limits			
OEL TWA [1]	5,4 mg/m³		
OEL TWA [2]	1 ppm		
OEL STEL	10,8 mg/m³		
OEL STEL [ppm]	2 ppm		
Finland - Occupational Exposure Limits			
HTP (OEL TWA) [1]	5,4 mg/m³		
HTP (OEL TWA) [2]	1 ppm		
France - Occupational Exposure Limits			
VME (OEL TWA)	5,4 mg/m³		
VME (OEL TWA) [ppm]	1 ppm		
Germany - Occupational Exposure Limits (TRGS 900)			
AGW (OEL TWA) [1]	54 mg/m³		
AGW (OEL TWA) [2]	10 ppm		
Ireland - Occupational Exposure Limits			
OEL TWA [1]	5,4 mg/m³		
OEL TWA [2]	1 ppm		
Italy - Occupational Exposure Limits			
OEL TWA	5,4 mg/m³		
OEL TWA [ppm]	1 ppm		
Latvia - Occupational Exposure Limits			
OEL TWA	5,4 mg/m³		
OEL TWA [ppm]	1 ppm		

Safety Data Sheet

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

2-ethylhexan-1-ol (104-76-7)		
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	
OEL TWA [ppm]	1 ppm	
Spain - Occupational Exposure Limits		
VLA-ED (OEL TWA) [1]	5,4 mg/m³	
VLA-ED (OEL TWA) [2]	1 ppm	
VLA-EC (OEL STEL)	110 mg/m³	
VLA-EC (OEL STEL) [ppm]	20 ppm	
Sweden - Occupational Exposure Limits		
NGV (OEL TWA)	5,4 mg/m³	
NGV (OEL TWA) [ppm]	1 ppm	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	5,4 mg/m³	
Norway - Occupational Exposure Limits		
Grenseverdi (OEL TWA) [1]	5,4 mg/m³	
Grenseverdi (OEL TWA) [2]	1 ppm	
Korttidsverdi (OEL STEL)	54 mg/m³	
Korttidsverdi (OEL STEL) [ppm]	10 ppm	
Switzerland - Occupational Exposure Limits		
MAK (OEL TWA) [1]	5,4 mg/m³	
MAK (OEL TWA) [2]	1 ppm	
KZGW (OEL STEL)	10,8 mg/m³	
KZGW (OEL STEL) [ppm]	2 ppm	
naphthalene (91-20-3)		
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA	50 mg/m³	
IOEL TWA [ppm]	10 ppm	
Austria - Occupational Exposure Limits		
MAK (OEL TWA)	50 mg/m³	
MAK (OEL TWA) [ppm]	10 ppm	
Belgium - Occupational Exposure Limits		
OEL TWA	53 mg/m³	
OEL TWA [ppm]	10 ppm	
OEL STEL	80 mg/m³	
OEL STEL [ppm]	15 ppm	

Safety Data Sheet

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

naphthalene (91-20-3)			
Denmark - Occupational Exposure Limits			
OEL TWA [1]	50 mg/m³		
OEL TWA [2]	10 ppm		
OEL STEL	100 mg/m³		
OEL STEL [ppm]	20 ppm		
Finland - Occupational Exposure Limits			
HTP (OEL TWA) [1]	5 mg/m³		
HTP (OEL TWA) [2]	1 ppm		
HTP (OEL STEL)	10 mg/m³		
HTP (OEL STEL) [ppm]	2 ppm		
France - Occupational Exposure Limits			
VME (OEL TWA)	50 mg/m³		
VME (OEL TWA) [ppm]	10 ppm		
Germany - Occupational Exposure Limits (TRGS 90	0)		
AGW (OEL TWA) [1]	2 mg/m³		
AGW (OEL TWA) [2]	0,4 ppm		
Hungary - Occupational Exposure Limits			
AK (OEL TWA)	50 mg/m³		
Ireland - Occupational Exposure Limits	Ireland - Occupational Exposure Limits		
OEL TWA [1]	50 mg/m³		
OEL TWA [2]	10 ppm		
Italy - Occupational Exposure Limits			
OEL TWA	50 mg/m³		
OEL TWA [ppm]	10 ppm		
Latvia - Occupational Exposure Limits			
OEL TWA	50 mg/m³		
OEL TWA [ppm]	10 ppm		
Netherlands - Occupational Exposure Limits			
TGG-8u (OEL TWA)	50 mg/m³		
TGG-15min (OEL STEL)	80 mg/m³		
Poland - Occupational Exposure Limits			
NDS (OEL TWA)	20 mg/m³		
NDSCh (OEL STEL)	50 mg/m³		
Romania - Occupational Exposure Limits			
OEL TWA	50 mg/m³		
OEL TWA [ppm]	9,5 ppm		
Spain - Occupational Exposure Limits			
VLA-ED (OEL TWA) [1]	53 mg/m³		
VLA-ED (OEL TWA) [2]	10 ppm		

Safety Data Sheet

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

naphthalene (91-20-3)		
VLA-EC (OEL STEL)	80 mg/m³	
VLA-EC (OEL STEL) [ppm]	15 ppm	
Sweden - Occupational Exposure Limits		
NGV (OEL TWA)	50 mg/m³	
NGV (OEL TWA) [ppm]	10 ppm	
KTV (OEL STEL)	80 mg/m³	
KTV (OEL STEL) [ppm]	15 ppm	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	53 mg/m³	
WEL TWA (OEL TWA) [2]	10 ppm	
WEL STEL (OEL STEL)	80 mg/m³	
WEL STEL (OEL STEL) [ppm]	15 ppm	
Switzerland - Occupational Exposure Limits		
MAK (OEL TWA) [1]	50 mg/m³	
MAK (OEL TWA) [2]	10 ppm	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	50 mg/m³	
ACGIH OEL TWA [ppm]	10 ppm	
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-48-9)		
France - Occupational Exposure Limits		
VME (OEL TWA)	1200 mg/m³	
VME (OEL TWA) [ppm]	184 ppm	
Norway - Occupational Exposure Limits		
Grenseverdi (OEL TWA) [1]	275 mg/m³	
Grenseverdi (OEL TWA) [2]	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

Safety Data Sheet

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

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses. EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Gloves. EN 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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Appearance : clear.

: dark yellow. brown. Colour : No data available Odour : No data available Odour threshold : No data available рΗ Relative evaporation rate (butylacetate=1) : No data available Melting point No data available No data available Freezing point Boiling point No data available

Flash point : 63 °C

Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : No data available Vapour pressure : No data available Relative vapour density at 20 °C : No data available Relative density : No data available

Density : $0.796 - 0.811 \text{ g/cm}^3 (20^{\circ}\text{C})$

Solubility : No data available
Partition coefficient n-octanol/water (Log Pow) : No data available
Viscosity, kinematic : < 20,5 mm²/s (40°C)
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

Safety Data Sheet

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

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

Risk of explosion if heated in a confined system.

10.4. Conditions to avoid

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

10.5. Incompatible materials

No additional information available

LD50 dermal

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 toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : 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	
methyl-1H-benzotriazole (29385-43-1)		
LD50 oral	720 mg/kg	
LD50 dermal rabbit	> 2000 mg/kg	
amides, C18-unsatd., N-[3-(dimethylamine)propyl]		
LD50 oral rat	> 2000 mg/kg	
LD50 dermal rat	> 2000 mg/kg	
naphthalene (91-20-3)		
LD50 oral	490 mg/kg	
LD50 dermal rabbit	> 2000 mg/kg	
LD50 dermal	> 2500 mg/kg	
LC50 Inhalation - Rat	> 340 mg/m³	
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics (246538-78-3)		
LD50 oral	> 10000 mg/kg	
	i e e e e e e e e e e e e e e e e e e e	

> 3160 mg/kg

Safety Data Sheet

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

1,1'-Bis-(ferrocenyl)octane		
LD50 oral rat	> 2000 (OECD 423)	
	·	
LD50 dermal rat	> 2000 (OECD 402)	
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/m³ 4 hours	
Skin corrosion/irritation :	Not classified	
Serious eye damage/irritation :	Not classified	
Respiratory or skin sensitisation :	Not classified	
Germ cell mutagenicity :	Not classified	
	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.	
Hydrocarbons, C10, aromatics, >1% naphthalo	ene	
STOT-single exposure	May cause drowsiness or dizziness.	
STOT-repeated exposure :	Not classified	
1,1'-Bis-(ferrocenyl)octane		
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
Aspiration hazard :	May be fatal if swallowed and enters airways.	
5 IN 1 CLEANER DIESEL BARDAHL		
Viscosity, kinematic	< 20,5 mm²/s (40°C)	

SECTION 12: Ecological information

12.1. Toxicity

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

Hazardous to the aquatic environment, short-term : Not classified

(acute

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

(chronic)

(CHIONIC)		
2-ethylhexyl nitrate (27247-96-7)		
LC50 - Fish [1]	28,2 mg/l (Pimephales promelas, 4DY)	
LC50 - Fish [2]	17,1 mg/l (Ide mélanote (Leuciscus idus),4DY)	
EC50 - Other aquatic organisms [1]	> 12,6 mg/l (Cladocère, 2DY)	
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)	

Safety Data Sheet

Biodegradation

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

according to the REACH Regulation (EC) 1907/2000 amended by Regulation (EO) 2020/676		
2-ethylhexan-1-ol (104-76-7)		
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)	
methyl-1H-benzotriazole (29385-43-1)		
LC50 - Fish [1]	55 mg/l Cyprinodon variegatus	
EC50 - Other aquatic organisms [1]	55 mg/l Arcartia tonsa	
ErC50 algae	53 mg/l Skeletonema costatum	
amides, C18-unsatd., N-[3-(dimethylamine)pro	ppyl]	
LC50 - Fish [1]	0,22 mg/l Poisson - Danio rerio	
EC50 - Crustacea [1]	0,28 mg/l Daphnie - Daphnia magna	
EC50 72h - Algae [1]	> 0,96 mg/l Algues - Pseudokirchneriella subcapitata	
Hydrocarbons, C10, aromatics, >1% naphthalene		
LC50 - Fish [1]	2 mg/l 4 days	
EC50 - Other aquatic organisms [1]	3 mg/l aquatic invertebrates	
EC50 - Other aquatic organisms [2]	1,1 mg/l algae	
naphthalene (91-20-3)		
LC50 - Fish [2]	≥ 2350 µg/l 48 hours	
EC50 - Crustacea [1]	1,96 mg/l 48 hours	
1,1'-Bis-(ferrocenyl)octane		
LC50 - Fish [1]	> 0,5 mg/l (OECD 203)	
EC50 - Crustacea [1]	> 0,36 mg/l (OECD 202)	
EC50 72h - Algae [1]	> 0,36 mg/l (OECD 201)	
Hydrocarbons, C10-C13, n-alkanes, isoalkane	es, cyclics, <2% aromatics (64742-48-9)	
LC50 - Fish [1]	> 1000 mg/l	
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		
2-ethylhexan-1-ol (104-76-7)		
Persistence and degradability	Readily biodegradable.	
Biodegradation	95 % (OECD TG 302 B), 100% (OECD TG 301 C)	
amides, C18-unsatd., N-[3-(dimethylamine)propyl]		
Biodegradation	91 %	
Hydrocarbons, C10, aromatics, >1% naphthalene		

58 % 28 days

Safety Data Sheet

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

Hydrocarbons, C11-C13, isoalkanes, <2% aromatics (246538-78-3)		
Persistence and degradability	Readily biodegradable.	
1,1'-Bis-(ferrocenyl)octane		
Persistence and degradability Not readily biodegradable.		
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-48-9)		
Biodegradation 80 % 28 days		

12.3. Bioaccumulative potential

2-ethylhexyl nitrate (27247-96-7)	
Partition coefficient n-octanol/water (Log Kow)	5,24
2-ethylhexan-1-ol (104-76-7)	
Bioconcentration factor (BCF REACH)	25,35
Partition coefficient n-octanol/water (Log Kow)	2,9
1,1'-Bis-(ferrocenyl)octane	
Partition coefficient n-octanol/water (Log Pow)	4,6
Bioaccumulative potential	High potential (3).

12.4. Mobility in soil

2-ethylhexyl nitrate (27247-96-7)	
Mobility in soil	(terre-3,75)
2-ethylhexan-1-ol (104-76-7)	
Mobility in soil	-1,42

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. 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. Ecology - waste materials

: Do not discharge the product into the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

13/16 01-02-22 (Revision date) EN (English)

Safety Data Sheet

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

ADR	IMDG	IATA	RID
14.1. UN number			
Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shippin	g name		
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard o	class(es)		
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental haz	ards		
Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information	n available		

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

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

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

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

and or ordered production	
Detergent Regulation (648/2004/EC): Labelling of contents:	
Component	%
aliphatic hydrocarbons	≥30%
aromatic hydrocarbons	<5%

Safety Data Sheet

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

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 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 65	Eczematiform lesions of allergic mechanism
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 : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – : None of the components are listed

Vruchtbaarheid

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

Switzerland

Storage class (LK) : LK 6.1 - Toxic materials

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
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
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1

Safety Data Sheet

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

Full text of H- and EUH-statements:	
Carc. 2	Carcinogenicity, Category 2
EUH044	Risk of explosion if heated under confinement.
EUH066	Repeated exposure may cause skin dryness or cracking.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H360FD	May damage fertility. May damage the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
Repr. 1B	Reproductive toxicity, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
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.