OCTANE BOOSTER

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Reference number: 2301
Issue date: 06-10-17 Revision date: 20-08-25 Supersedes version of: 02-11-22 Version: 4.0

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

1.1. Product identifier

Product form : Mixture
Product name : OCTANE BOOSTER
UFI : DENJ-AMS4-560P-8EDQ
Product code : 2301 # 739952R15

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

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
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

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]

Specific target organ toxicity – Single exposure, Category 3, Narcosis H336

Aspiration hazard, Category 1	H304
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411

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

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07 GHS08 GHS09

Signal word (CLP) : Danger

Contains : Hydrocarbons, C10, aromatics, <1% naphtalene;

Hazard statements (CLP) : H304 - May be fatal if swallowed and enters airways.
H336 - May cause drowsiness or dizziness.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P260 - Do not breathe vapours.
P262 - Do not get in eyes, on skin, or on clothing.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor.
P312 - Call a POISON CENTER, doctor if you feel unwell.
P331 - Do NOT induce vomiting.
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
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 and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or 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

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C10, aromatics, <1% naphtalene; substance with national workplace exposure limit(s) (FR)	CAS-No.: 64742-94-5 EC-No.: 918-811-1 REACH-no: 01-2119463583-34	90- 100	STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,2,4-trimethylbenzene substance with national workplace exposure limit(s) (AT, BE, DE, DK, ES, FR, HU, IE, LV, NL, PL, RO); substance with a Community workplace exposure limit	CAS-No.: 95-63-6 EC-No.: 202-436-9 EC Index-No.: 601-043-00-3 REACH-no: 01-211947235-42	1 -5	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 (ATE=1,5 mg/l/4h) Acute Tox. 4 (Inhalation:dust,mist), H332 (ATE=1,5 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Hydrocarbons, C10, aromatics, >1% naphthalene	CAS-No.: 64742-94-5 EC-No.: 919-284-0 REACH-no: 01-2119463588-24	<3	STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066
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	<1	Flam. Sol. 2, H228 Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Carc. 2, H351 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)
ferrocene	CAS-No.: 102-54-5 EC-No.: 203-039-3 REACH-no: 01-2119978280-34	<1	Flam. Sol. 1, H228 Acute Tox. 4 (Oral), H302 (ATE=1320 mg/kg bodyweight) Acute Tox. 4 (Inhalation:vapour), H332 (ATE=11 mg/l/4h) Repr. 1B, H360FD STOT RE 2, H373 Aquatic Chronic 1, H410 (M=10)
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	<1	Acute Tox. 4 (Oral), H302 (ATE=490 mg/kg bodyweight) Carc. 2, H351 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)

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 : May cause drowsiness or dizziness.

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

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

1,2,4-trimethylbenzene (95-63-6)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	1,2,4-Trimethylbenzene
IOEL TWA	100 mg/m³
	20 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	100 mg/m³
	20 ppm
MAK (OEL STEL)	150 mg/m³
	30 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	100 mg/m³
	20 ppm
Denmark - Occupational Exposure Limits	
OEL TWA	100 mg/m³
	20 ppm
OEL STEL	200 mg/m³
	40 ppm
France - Occupational Exposure Limits	
Local name	1,2,4-Triméthylbenzène
VME (OEL TWA)	100 mg/m³
	20 ppm
VLE (OEL C/STEL)	250 mg/m³
	50 ppm
Remark	Valeurs règlementaires contraignantes
Regulatory reference	Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016; Décret n° 2019-1487)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	100 mg/m³
	20 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	100 mg/m³

1,2,4-trimethylbenzene (95-63-6)	
Ireland - Occupational Exposure Limits	
OEL TWA	100 mg/m³
	20 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	100 mg/m³
	20 ppm
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	100 mg/m³
TGG-15min (OEL STEL)	200 mg/m³
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	100 mg/m³
NDSP (OEL C)	170 mg/m³
Romania - Occupational Exposure Limits	
OEL TWA	100 mg/m³
	20 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	100 mg/m³
	20 ppm

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-47-8)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	125 mg/m³
	25 ppm

naphthalene (91-20-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	50 mg/m³
	10 ppm
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	50 mg/m³
	10 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	53 mg/m³
	10 ppm
OEL STEL	80 mg/m³
	15 ppm
Denmark - Occupational Exposure Limits	
OEL TWA	50 mg/m³
	10 ppm
OEL STEL	100 mg/m³

naphthalene (91-20-3)	
	20 ppm
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	5 mg/m³
	1 ppm
HTP (OEL STEL)	10 mg/m³
	2 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	50 mg/m³
	10 ppm
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	2 mg/m³
	0,4 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	50 mg/m³
Ireland - Occupational Exposure Limits	
OEL TWA	50 mg/m³
	10 ppm
Italy - Occupational Exposure Limits	
OEL TWA	50 mg/m³
	10 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	50 mg/m³
	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
	9,5 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	53 mg/m³
	10 ppm
VLA-EC (OEL STEL)	80 mg/m³
	15 ppm
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	50 mg/m³

naphthalene (91-20-3)	
	10 ppm
KGV (OEL STEL)	80 mg/m³
	15 ppm
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	53 mg/m³
	10 ppm
WEL STEL (OEL STEL)	80 mg/m³
	15 ppm
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	50 mg/m³
	10 ppm
USA - ACGIH - Occupational Exposure Limits	
ACGIH® TLV® TWA	50 mg/m³
	10 ppm

Hydrocarbons, C10, aromatics, <1% naphtalene; (64742-94-5)	
France - Occupational Exposure Limits	
VME (OEL TWA)	100 mg/m³
	17 ppm

naphthalene (91-20-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Naphthalene
IOEL TWA	50 mg/m³
	10 ppm
Remark	(Year of adoption 2010)
Regulatory reference	COMMISSION DIRECTIVE 91/322/EEC; SCOEL Recommendations
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	50 mg/m³
	10 ppm
Belgium - Occupational Exposure Limits	
Local name	Naphtalène # Naftaleen
OEL TWA	53 mg/m³
	10 ppm
OEL STEL	80 mg/m³
	15 ppm
Remark	D: la mention “D” signifie que la résorption de l’agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l’exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l’agent dans l’air. # D: de vermelding “D” betekent dat de opname van het agens via de huid, de slijmvliezen of de ogen een belangrijk deel van de totale blootstelling vormt. Deze opname kan het gevolg zijn van zowel direct contact als zijn aanwezigheid in de lucht.

naphthalene (91-20-3)	
Regulatory reference	Koninklijk besluit/Arrêté royal 21/01/2020
Denmark - Occupational Exposure Limits	
OEL TWA	50 mg/m³
	10 ppm
OEL STEL	100 mg/m³
	20 ppm
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	5 mg/m³
	1 ppm
HTP (OEL STEL)	10 mg/m³
	2 ppm
France - Occupational Exposure Limits	
Local name	Naphtalène
VME (OEL TWA)	50 mg/m³
	10 ppm
Remark	Valeurs recommandées/admises; substance classée cancérogène de catégorie 2
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	2 mg/m³
	0,4 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	50 mg/m³
Ireland - Occupational Exposure Limits	
OEL TWA	50 mg/m³
	10 ppm
OEL STEL	75 mg/m³
	15 ppm
Italy - Occupational Exposure Limits	
OEL TWA	50 mg/m³
	10 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	50 mg/m³
	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

naphthalene (91-20-3)	
Romania - Occupational Exposure Limits	
OEL TWA	50 mg/m³
	9,5 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	53 mg/m³
	10 ppm
VLA-EC (OEL STEL)	80 mg/m³
	15 ppm
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	50 mg/m³
	10 ppm
KGV (OEL STEL)	80 mg/m³
	15 ppm
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	53 mg/m³
	10 ppm
WEL STEL (OEL STEL)	80 mg/m³
	15 ppm
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	50 mg/m³
	10 ppm
USA - ACGIH - Occupational Exposure Limits	
ACGIH® TLV® TWA	50 mg/m³
	10 ppm

1,2,4-trimethylbenzene (95-63-6)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	1,2,4-Trimethylbenzene
IOEL TWA	100 mg/m³
	20 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	100 mg/m³
	20 ppm
MAK (OEL STEL)	150 mg/m³
	30 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	100 mg/m³
	20 ppm

1,2,4-trimethylbenzene (95-63-6)	
Denmark - Occupational Exposure Limits	
OEL TWA	100 mg/m³
	20 ppm
OEL STEL	200 mg/m³
	40 ppm
France - Occupational Exposure Limits	
Local name	1,2,4-Triméthylbenzène
VME (OEL TWA)	100 mg/m³
	20 ppm
VLE (OEL C/STEL)	250 mg/m³
	50 ppm
Remark	Valeurs règlementaires contraignantes
Regulatory reference	Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016; Décret n° 2019-1487)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	100 mg/m³
	20 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	100 mg/m³
Ireland - Occupational Exposure Limits	
OEL TWA	100 mg/m³
	20 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	100 mg/m³
	20 ppm
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	100 mg/m³
TGG-15min (OEL STEL)	200 mg/m³
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	100 mg/m³
NDSP (OEL C)	170 mg/m³
Romania - Occupational Exposure Limits	
OEL TWA	100 mg/m³
	20 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	100 mg/m³
	20 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	:	dark 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	:	65 °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	:	0,878 – 0,893 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

Hydrocarbons, C10-C13, aromatics, >1% naphtalene (64742-94-5)	
LD50 dermal rabbit	> 2 ml/kg
LC50 Inhalation - Rat	> 590 mg/m³ (vapour)

ferrocene (102-54-5)	
LD50 oral rat	1320 mg/kg
LD50 dermal rat	> 3000 mg/kg (OCDE 402)

1,2,4-trimethylbenzene (95-63-6)	
LC50 Inhalation - Rat	18000 mg/m³

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-47-8)	
LD50 oral rat	> 5000 mg/kg
LD50 oral	> 5000
LD50 dermal rabbit	> 5000 mg/kg

naphthalene (91-20-3)	
LD50 oral	490 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 340 mg/m³

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-48-9)	
LD50 oral rat	> 6000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat	4 hours

acetic acid, cerium(3+) salt (537-00-8)	
LD50 oral rat	> 5000 mg/kg

Neodecanoic acid (26896-20-8)	
LD50 dermal rat	3640 mg/kg
LC50 Inhalation - Rat (Vapours)	> 3000 mg/l/4h

Hydrocarbons, C10, aromatics, <1% naphtalene; (64742-94-5)	
LD50 oral rat	≈ 6318 mg/kg bodyweight
LD50 oral	> 10000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg bodyweight
LD50 dermal	> 3160 mg/kg
LC50 Inhalation - Rat	> 4688 mg/m³

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

1,2,4-trimethylbenzene (95-63-6)	
LC50 Inhalation - Rat	18000 mg/m³

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 : May cause drowsiness or dizziness.

1,2,4-trimethylbenzene (95-63-6)	
STOT-single exposure	May cause respiratory irritation.

Hydrocarbons, C10, aromatics, >1% naphthalene (64742-94-5)	
STOT-single exposure	May cause drowsiness or dizziness.

Hydrocarbons, C10, aromatics, <1% naphtalene; (64742-94-5)	
STOT-single exposure	May cause drowsiness or dizziness.

1,2,4-trimethylbenzene (95-63-6)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

ferrocene (102-54-5)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

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

OCTANE BOOSTER	
Viscosity, kinematic	< 20,5 mm²/s (40°C)

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-48-9)	
Viscosity, kinematic	1,3 mm²/s

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

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

Hazardous to the aquatic environment, short–term (acute) : Not classified

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

Hydrocarbons, C10-C13, aromatics, >1% naphtalene (64742-94-5)	
LC50 - Fish [1]	2 – 5 mg/l
EC50 - Crustacea [1]	3 – 10 mg/l (Daphnia)
EC50 72h - Algae [1]	1 – 3 mg/l

1,2,4-trimethylbenzene (95-63-6)	
LC50 - Fish [1]	7,72 mg/l 4 days
EC50 - Other aquatic organisms [1]	3,6 mg/l

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-47-8)	
LC50 - Fish [1]	> 45 mg/l

Hydrocarbons, C10, aromatics, >1% naphthalene (64742-94-5)	
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 [1]	1,6 mg/l (Oncorhynchus mykiss)
LC50 - Fish [2]	48 hours

naphthalene (91-20-3)	
EC50 - Crustacea [1]	2350 µg/l 48 hours
EC50 - Crustacea [2]	1,96 mg/l (Daphnia - Water flea - Daphnia magna)
NOEC chronic fish	1,5 mg/l
NOEC chronic crustacea	0,5 mg/l

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-48-9)	
LC50 - Fish [1]	> 1000 mg/l
EC50 - Crustacea [1]	> 1000 mg/l
EC50 72h - Algae [1]	> 1000 mg/l

Neodecanoic acid (26896-20-8)	
LC50 - Other aquatic organisms [1]	> 1000 mg/l (Daphnia magna (Grande daphnie))
NOEC chronic crustacea	3,4 mg/l (Ceriodaphnia dubia)

Hydrocarbons, C10, aromatics, <1% naphtalene; (64742-94-5)	
LC50 - Fish [1]	2 mg/l
EC50 - Crustacea [1]	3 mg/l
EC50 72h - Algae [1]	1 – 3 mg/l Pseudokirchneriella subcapitata
NOEC chronic fish	0,44 mg/l (Oncorhynchus mykiss - QSAR Petrotox)
NOEC chronic crustacea	0,77 mg/l (Daphnia magna - QSAR Petrotox)
NOEC chronic algae	1 mg/l Pseudokirchneriella subcapitata - OECD 201

naphthalene (91-20-3)	
LC50 - Fish [2]	≥ 2350 µg/l 48 hours
EC50 - Crustacea [1]	1,96 mg/l 48 hours

1,2,4-trimethylbenzene (95-63-6)	
LC50 - Fish [1]	7,72 mg/l 4 days
EC50 - Other aquatic organisms [1]	3,6 mg/l

12.2. Persistence and degradability

Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate (7491-09-0)	
Persistence and degradability	Readily biodegradable.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-47-8)	
Biodegradation	69 % 28days

Hydrocarbons, C10, aromatics, >1% naphthalene (64742-94-5)	
Biodegradation	58 % 28 days

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-48-9)	
Biodegradation	80 % 28 days

Hydrocarbons, C10, aromatics, <1% naphtalene; (64742-94-5)	
Biodegradation	49,6 % 28 jours

12.3. Bioaccumulative potential

1,2,4-trimethylbenzene (95-63-6)	
Partition coefficient n-octanol/water (Log Pow)	4,09

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-47-8)	
Partition coefficient n-octanol/water (Log Pow)	6 – 8

Neodecanoic acid (26896-20-8)	
Bioconcentration factor (BCF REACH)	< 225
Partition coefficient n-octanol/water (Log Pow)	2,1

1,2,4-trimethylbenzene (95-63-6)	
Partition coefficient n-octanol/water (Log Pow)	4,09

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

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.

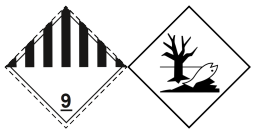
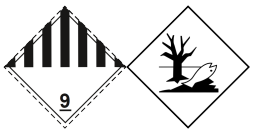
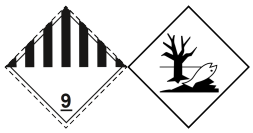
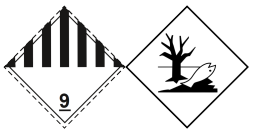
Additional information : Empty the packaging completely prior to disposal. Do not re-use empty containers.

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

SECTION 14: Transport information

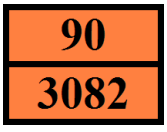
In accordance with ADR / IMDG / IATA / RID

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.

ADR	IMDG	IATA	RID
Transport document description			
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Hydrocarbons, C10, aromatics, <1% naphtalene; ; 1,2,4-trimethylbenzene), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Hydrocarbons, C10, aromatics, <1% naphtalene; ; 1,2,4-trimethylbenzene), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (CONTAINS : Hydrocarbons, C10, aromatics, <1% naphtalene; ; 1,2,4-trimethylbenzene), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Hydrocarbons, C10, aromatics, <1% naphtalene; ; 1,2,4-trimethylbenzene), 9, III
14.3. Transport hazard class(es)			
9	9	9	9
			
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available			

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	M6
Special provisions (ADR)	:	274, 335, 375, 601
Limited quantities (ADR)	:	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, 969
Limited quantities (IMDG)	:	5 L

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

Air transport

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

Rail transport

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

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

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 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 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 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-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 – Vruchtbaarheid : None of the components are listed

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

Denmark

Class for fire hazard : Class III-1

Store unit : 50 liter

Classification remarks : Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

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 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) 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
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Flam. Sol. 1	Flammable solids, Category 1
Flam. Sol. 2	Flammable solids, Category 2
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, Narcosis
H226	Flammable liquid and vapour.
H228	Flammable solid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

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.