VSPe Power Plus Multishot

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 5/23/2016 Revision date: 5/28/2025 Version: 1.2

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

1.1. Product identifier

Product form : Mixture
Product name : VSPe Power Plus Multishot
UFI : WMWP-F0FP-J009-RVJ8
Product code : 7917

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Use of the substance/mixture : Fuel additives

1.3. Details of the supplier of the safety data sheet

Manufacturer
Millers Oils Ltd
Hillside Oilworks
Rastrick Common
HD6 3DP Brighouse, West Yorkshire
United Kingdom
T +44 (0)1484 713201, F +44 (0)1484 721263
h.s@millersoils.co.uk

1.4. Emergency telephone number

Emergency number : 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Carcinogenicity, Category 2	H351
Reproductive toxicity, Category 1B	H360
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336
Aspiration hazard, Category 1	H304
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410

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

Adverse physicochemical, human health and environmental effects

Suspected of causing cancer. May damage fertility or the unborn child. May cause drowsiness or dizziness. Causes skin irritation. Causes serious eye damage. May be fatal if swallowed and enters airways. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS05 GHS07 GHS08 GHS09

Signal word (CLP) : Danger

Contains	:	HYDROCARBONS, C10, AROMATICS, <1% NAPHTHALENE; POTASSIUM 1,2-BIS(2-ETHYLHEXYLOXYCARBONYL)-ETHANESULPHONATE; Hydrocarbons, C10, aromatics, >1% naphthalene; DISTILLATES (PETROLEUM), HYDROTREATED LIGHT; FERROCENE; ETHANOL, 2,2'-IMINOBIS-, N-TALLOW ALKYL DERIVATIVES
Hazard statements (CLP)	:	H304 - May be fatal if swallowed and enters airways. H315 - Causes skin irritation. H318 - Causes serious eye damage. H336 - May cause drowsiness or dizziness. H351 - Suspected of causing cancer. H360 - May damage fertility or the unborn child. H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	:	P102 - Keep out of reach of children. P301+P310 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER. P261 - Avoid breathing mist, spray, vapours. P280 - Wear protective clothing, eye protection, face protection. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 - IF exposed or concerned: Get medical advice/attention. P501 - Dispose of container, contents to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. P405 - Store locked up.
EUH-statements	:	EUH066 - Repeated exposure may cause skin dryness or cracking.

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

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
HYDROCARBONS, C10, AROMATICS, <1% NAPHTHALENE	EC-No.: 918-811-1 REACH-no: 01-2119463583-34	< 70	Aquatic Chronic 2, H411 Asp. Tox. 1, H304 STOT SE 3, H336
POTASSIUM 1,2-BIS(2-ETHYLHEXYLOXYCARBONYL)-ETHANESULPHONATE	CAS-No.: 7491-09-0 EC-No.: 231-308-5 REACH-no: 01-2119919740-39	≥ 1 – < 30	Skin Irrit. 2, H315 Eye Dam. 1, H318
Hydrocarbons, C10, aromatics, >1% naphthalene	EC-No.: 919-284-0 REACH-no: 01-2119463588-24	< 10	Carc. 2, H351 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT	CAS-No.: 64742-47-8 EC-No.: 265-149-8 REACH-no: 01-2119484819-18	< 10	Asp. Tox. 1, H304

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-ethylhexan-1-ol substance with national workplace exposure limit(s) (BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, RO, SE, SI, SK, IS, NO, RS, CH); substance with a Community workplace exposure limit	CAS-No.: 104-76-7 EC-No.: 203-234-3 REACH-no: 01-2119487289-20	< 10	Acute Tox. 4 (Inhalation:gas), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 3, H412
1,2,4-trimethylbenzene substance with national workplace exposure limit(s) (BG, CZ, DE, DK, EE, ES, FI, FR, GR, HR, HU, IE, IT, LU, LV, MT, NL, PL, RO, SE, SI, SK, AL, IS, NO, RS); 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: 01-2119472135-42	≥ 1 – < 10	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Aquatic Chronic 2, H411
FERROCENE substance with national workplace exposure limit(s) (ES, FI, FR, GR, IE, PT, CH)	CAS-No.: 102-54-5 EC-No.: 203-039-3 REACH-no: 01-2119978280-34	≥ 1 – < 10	Flam. Sol. 1, H228 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Repr. 1A, H360FD STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
ETHANOL, 2,2'-IMINOBIS-, N-TALLOW ALKYL DERIVATIVES	EC-No.: 263-177-5	≥ 1 – < 10	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
naphthalene substance with national workplace exposure limit(s) (BE, BG, CZ, DE, DK, EE, ES, FI, FR, GR, HR, HU, IE, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, AL, IS, NO, RS, CH); 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	Carc. 2, H351 Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,2,3-trimethylbenzene substance with national workplace exposure limit(s) (BG, CZ, DE, DK, EE, ES, FI, FR, GR, HR, HU, IE, IT, LU, LV, MT, NL, PL, RO, SE, SI, SK, AL, IS, NO, RS); substance with a Community workplace exposure limit	CAS-No.: 526-73-8 EC-No.: 208-394-8	< 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319
mesitylene; 1,3,5-trimethylbenzene substance with national workplace exposure limit(s) (BE, BG, CZ, DE, DK, ES, FI, FR, GR, HR, HU, IE, IT, LT, LU, LV, MT, PL, RO, SE, SI, SK, AL, IS, NO, RS); substance with a Community workplace exposure limit	CAS-No.: 108-67-8 EC-No.: 203-604-4 EC Index-No.: 601-025-00-5	< 1	Flam. Liq. 3, H226 STOT SE 3, H335 Aquatic Chronic 2, H411

Specific concentration limits:

Name	Product identifier	Specific concentration limits (%)
mesitylene; 1,3,5-trimethylbenzene	CAS-No.: 108-67-8 EC-No.: 203-604-4 EC Index-No.: 601-025-00-5	(25 ≤ C ≤ 100) STOT SE 3; H335

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 : If you feel unwell, seek medical advice.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
First-aid measures after ingestion : Do not induce vomiting. Get immediate medical advice/attention. Rinse mouth.
First-aid measures for first aider : First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects : May cause drowsiness or dizziness.
Symptoms/effects after inhalation : None under normal conditions.
Symptoms/effects after skin contact : Irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis.
Chronic symptoms : May damage fertility or the unborn child.

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 : Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. See section 8 of the SDS for more information on personal protective equipment.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible. Do not touch or walk on the spilled product.

Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation. Notify authorities if product enters sewers or public waters. Absorb spilled material with sand or earth.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Ensure good ventilation of the work station. Avoid breathing vapours. Avoid contact with skin and eyes.

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

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Packaging materials : Store always product in container of same material as original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

2-ethylhexan-1-ol (104-76-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	2-ethylhexan-1-ol
IOEL TWA	5.4 mg/m³
	1 ppm
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164

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

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

1,2,3-trimethylbenzene (526-73-8)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	1,2,3-Trimethylbenzene
IOEL TWA	100 mg/m³
	20 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

mesitylene; 1,3,5-trimethylbenzene (108-67-8)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Mesitylene (Trimethylbenzenes)
IOEL TWA	100 mg/m³
	20 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

DNEL and PNEC

POTASSIUM 1,2-BIS(2-ETHYLHEXYLOXYCARBONYL)-ETHANESULPHONATE (7491-09-0)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	10 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	98.7 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	14.8 mg/m³
Long-term - systemic effects, dermal	5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.0066 mg/l
PNEC aqua (marine water)	0.00066 mg/l
PNEC aqua (intermittent, freshwater)	0.066 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.525 mg/kg dwt
PNEC sediment (marine water)	0.0525 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.101 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	122 mg/l

Hydrocarbons, C10, aromatics, >1% naphthalene	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	12.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	151 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	7.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	32 mg/m³
Long-term - systemic effects, dermal	7.5 mg/kg bodyweight/day

2-ethylhexan-1-ol (104-76-7)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	53.2 mg/m³
Long-term - systemic effects, dermal	23 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	12.8 mg/m³
Long-term - local effects, inhalation	53.2 mg/m³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	26.6 mg/m³
Long-term - systemic effects,oral	1.1 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2.3 mg/m³
Long-term - systemic effects, dermal	11.4 mg/kg bodyweight/day
Long-term - local effects, inhalation	26.6 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.017 mg/l
PNEC aqua (marine water)	0.0017 mg/l
PNEC aqua (intermittent, freshwater)	0.17 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.284 mg/kg dwt
PNEC sediment (marine water)	0.0284 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.047 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	55 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

1,2,4-trimethylbenzene (95-63-6)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	100 mg/m³
Acute - local effects, inhalation	100 mg/m³
Long-term - systemic effects, dermal	16171 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	100 mg/m³

1,2,4-trimethylbenzene (95-63-6)	
Long-term - local effects, inhalation	100 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	29.4 mg/m³
Acute - local effects, inhalation	29.4 mg/m³
Long-term - systemic effects,oral	15 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	29.4 mg/m³
Long-term - systemic effects, dermal	9512 mg/kg bodyweight/day
Long-term - local effects, inhalation	29.4 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.12 mg/l
PNEC aqua (marine water)	0.12 mg/l
PNEC aqua (intermittent, freshwater)	0.12 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	13.56 mg/kg dwt
PNEC sediment (marine water)	13.56 mg/kg dwt
PNEC (Soil)	
PNEC soil	2.34 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	2.41 mg/l

FERROCENE (102-54-5)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	0.04 mg/m³
Long-term - systemic effects, dermal	0.025 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.02 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0.013 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.005 mg/m³
Long-term - systemic effects, dermal	0.013 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.00003 mg/l
PNEC aqua (marine water)	0.000003 mg/l
PNEC aqua (intermittent, freshwater)	0.0103 mg/l
PNEC aqua (intermittent, marine water)	1.03 µg/l
PNEC (STP)	
PNEC sewage treatment plant	0.876 mg/l

ETHANOL, 2,2'-IMINOBIS-, N-TALLOW ALKYL DERIVATIVES	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0.3 mg/kg bodyweight/day

ETHANOL, 2,2'-IMINOBIS-, N-TALLOW ALKYL DERIVATIVES	
Long-term - systemic effects, inhalation	2.112 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0.214 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.214 mg/m³
Long-term - systemic effects, dermal	0.214 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.000214 mg/l
PNEC aqua (marine water)	0.000021 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	1.692 mg/kg dwt
PNEC sediment (marine water)	0.1692 mg/kg dwt
PNEC (Soil)	
PNEC soil	5 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	1.5 mg/l

naphthalene (91-20-3)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	3.57 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	25 mg/m³
Long-term - local effects, inhalation	25 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	2.4 µg/l
PNEC aqua (marine water)	2.4 µg/l
PNEC aqua (intermittent, freshwater)	20 µg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	67.2 µg/kg dw
PNEC sediment (marine water)	67.2 µg/kg dw
PNEC (Soil)	
PNEC soil	53.3 µg/kg dw
PNEC (STP)	
PNEC sewage treatment plant	2.9 mg/l

mesitylene; 1,3,5-trimethylbenzene (108-67-8)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	100 mg/m³
Acute - local effects, inhalation	100 mg/m³
Long-term - systemic effects, dermal	16171 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	100 mg/m³
Long-term - local effects, inhalation	100 mg/m³

mesitylene; 1,3,5-trimethylbenzene (108-67-8)	
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	29.4 mg/m³
Acute - local effects, inhalation	29.4 mg/m³
Long-term - systemic effects,oral	15 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	29.4 mg/m³
Long-term - systemic effects, dermal	9512 mg/kg bodyweight/day
Long-term - local effects, inhalation	29.4 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.101 mg/l
PNEC aqua (marine water)	0.101 mg/l
PNEC aqua (intermittent, freshwater)	0.101 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	7.86 mg/kg dwt
PNEC sediment (marine water)	7.86 mg/kg dwt
PNEC (Soil)	
PNEC soil	1.34 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	2.02 mg/l

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:
Wear recommended personal protective equipment.
Personal protective equipment symbol(s):

Eye and face protection

Eye protection:
Safety glasses

Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves

Respiratory protection

Respiratory protection:
No respiratory protection needed under normal use conditions

Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	brown.
Odour	:	aromatic.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Non flammable.
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	> 60 °C
Auto-ignition temperature	:	> 400 °C
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	1.26 mm²/s
Solubility	:	Insoluble.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	0.8 – 1
Relative vapour density at 20°C	:	> 1
Particle characteristics	:	Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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, AROMATICS, <1% NAPHTHALENE	
LD50 dermal	2000 mg/kg

POTASSIUM 1,2-BIS(2-ETHYLHEXYLOXYCARBONYL)-ETHANESULPHONATE (7491-09-0)	
LD50 dermal rabbit	> 10000 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Hydrocarbons, C10, aromatics, >1% naphthalene	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT (64742-47-8)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 798.1175 (Acute Oral Toxicity), Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal	> 2000 mg/kg
LC50 Inhalation - Rat	> 5.28 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), 95% CL: 0,42 -

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)
LC50 Inhalation - Rat	0.89 – 5.3 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

1,2,4-trimethylbenzene (95-63-6)	
LD50 oral rat	6000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: EU Method B.1 (Acute Toxicity (Oral)), 95% CL: 4920 - 7320
LC50 Inhalation - Rat	10.2 mg/l air Animal: rat

FERROCENE (102-54-5)	
LD50 oral rat	1320 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 3000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

ETHANOL, 2,2'-IMINOBIS-, N-TALLOW ALKYL DERIVATIVES	
LD50 oral rat	> 300 – < 2000 mg/kg

naphthalene (91-20-3)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LC50 Inhalation - Rat	> 0.4 mg/l air Animal: rat, Guideline: other:, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity)

mesitylene; 1,3,5-trimethylbenzene (108-67-8)	
LD50 oral rat	6000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: EU Method B.1 (Acute Toxicity (Oral)), 95% CL: 4920 - 7320

mesitylene; 1,3,5-trimethylbenzene (108-67-8)	
LC50 Inhalation - Rat	10.2 mg/l air Animal: rat

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer.

Reproductive toxicity : May damage fertility or the unborn child.

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT (64742-47-8)	
NOAEL (animal/male, F0/P)	≥ 3000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 415 [One-Generation Reproduction Toxicity Study (before 9 October 2017)]

naphthalene (91-20-3)	
LOAEL (animal/female, F0/P)	50 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:
LOAEL (animal/female, F1)	450 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:
NOAEL (animal/female, F0/P)	120 mg/kg bodyweight Animal: rabbit, Animal sex: female, Guideline: other:

STOT-single exposure : May cause drowsiness or dizziness.

HYDROCARBONS, C10, AROMATICS, <1% NAPHTHALENE	
STOT-single exposure	May cause drowsiness or dizziness.

Hydrocarbons, C10, aromatics, >1% naphthalene	
STOT-single exposure	May cause drowsiness or dizziness.

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

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

mesitylene; 1,3,5-trimethylbenzene (108-67-8)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

POTASSIUM 1,2-BIS(2-ETHYLHEXYLOXYCARBONYL)-ETHANESULPHONATE (7491-09-0)	
NOAEL (oral, rat, 90 days)	> 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)

Hydrocarbons, C10, aromatics, >1% naphthalene	
NOAEL (oral, rat, 90 days)	300 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT (64742-47-8)	
NOAEL (oral, rat, 90 days)	750 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	≥ 495 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

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)

2-ethylhexan-1-ol (104-76-7)	
NOAEC (inhalation, rat, gas, 90 days)	120 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

1,2,4-trimethylbenzene (95-63-6)	
NOAEL (oral, rat, 90 days)	600 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	1.8 mg/l air Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)

FERROCENE (102-54-5)	
LOAEL (oral, rat, 90 days)	25 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	5 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

naphthalene (91-20-3)	
LOAEL (oral, rat, 90 days)	400 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
LOAEC (inhalation, rat, vapour, 90 days)	0.011 mg/l air Animal: rat, Guideline: EPA OPP 82-4 (90-Day Inhalation Toxicity), Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEL (oral, rat, 90 days)	200 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

mesitylene; 1,3,5-trimethylbenzene (108-67-8)	
NOAEL (oral, rat, 90 days)	600 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	1.8 mg/l air Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)

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

VSPe Power Plus Multishot	
Viscosity, kinematic	1.26 mm²/s

1,2,3-trimethylbenzene (526-73-8)	
Viscosity, kinematic	1.26 mm²/s

11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : 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 12: Ecological information

12.1. Toxicity

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

Hazardous to the aquatic environment, short–term (acute) : Very toxic to aquatic life.

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

HYDROCARBONS, C10, AROMATICS, <1% NAPHTHALENE	
LC50 - Fish [1]	2 – 5 mg/l
EC50 - Other aquatic organisms [1]	3 – 10 mg/l

POTASSIUM 1,2-BIS(2-ETHYLHEXYLOXYCARBONYL)-ETHANESULPHONATE (7491-09-0)	
LC50 - Fish [1]	49 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	6.6 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	10.3 mg/l Test organisms (species): 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)

1,2,4-trimethylbenzene (95-63-6)	
LC50 - Fish [1]	7.72 mg/l Test organisms (species): Pimephales promelas
EC50 96h - Algae [1]	2.356 mg/l Test organisms (species): other:

FERROCENE (102-54-5)	
EC50 72h - Algae [1]	1.03 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

ETHANOL, 2,2'-IMINOBIS-, N-TALLOW ALKYL DERIVATIVES	
LC50 - Fish [1]	> 0.1 – 1 mg/l Zebra fish
EC50 - Crustacea [1]	> 0.1 – 1 mg/l Daphnia magna
EC50 72h - Algae [1]	> 1 – 1 mg/l green algae

naphthalene (91-20-3)	
EC50 - Crustacea [1]	2.16 mg/l Test organisms (species): Daphnia magna
NOEC (chronic)	0.59 mg/l Test organisms (species): Daphnia pulex Duration: '125 d'

mesitylene; 1,3,5-trimethylbenzene (108-67-8)	
LC50 - Fish [1]	12.52 mg/l Test organisms (species): Carassius auratus
NOEC (chronic)	0.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0.277 mg/l Test organisms (species): other: Duration: '30 d'

12.2. Persistence and degradability

VSPe Power Plus Multishot	
Persistence and degradability	Not established.

HYDROCARBONS, C10, AROMATICS, <1% NAPHTHALENE	
Persistence and degradability	Not rapidly degradable

POTASSIUM 1,2-BIS(2-ETHYLHEXYLOXYCARBONYL)-ETHANESULPHONATE (7491-09-0)	
Persistence and degradability	Not rapidly degradable

Hydrocarbons, C10, aromatics, >1% naphthalene	
Persistence and degradability	Not rapidly degradable

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT (64742-47-8)	
Persistence and degradability	Not rapidly degradable

2-ethylhexan-1-ol (104-76-7)	
Persistence and degradability	Not rapidly degradable

1,2,4-trimethylbenzene (95-63-6)	
Persistence and degradability	Not rapidly degradable

FERROCENE (102-54-5)	
Persistence and degradability	Not rapidly degradable

ETHANOL, 2,2'-IMINOBIS-, N-TALLOW ALKYL DERIVATIVES	
Persistence and degradability	Not rapidly degradable

naphthalene (91-20-3)	
Persistence and degradability	Not rapidly degradable

1,2,3-trimethylbenzene (526-73-8)	
Persistence and degradability	Not rapidly degradable

mesitylene; 1,3,5-trimethylbenzene (108-67-8)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

VSPe Power Plus Multishot	
Bioaccumulative potential	No bioaccumulation data available.

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

Adverse effects on the environment caused by endocrine disrupting properties : 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 %.

12.7. Other adverse effects

No additional information available

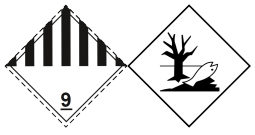
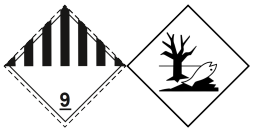
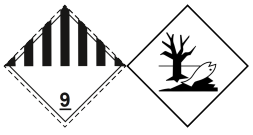
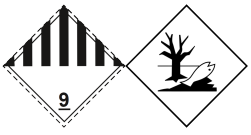
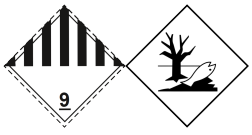
SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation	:	Disposal must be done according to official regulations.
Waste treatment methods	:	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	:	Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	:	Avoid release to the environment. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Additional information	:	Do not re-use empty containers.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hydrocarbons, C10 aromatics, <1% naphthalene, ferrocene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hydrocarbons, C10 aromatics, <1% naphthalene, ferrocene)	Environmentally hazardous substance, liquid, n.o.s. (Hydrocarbons, C10 aromatics, <1% naphthalene, ferrocene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hydrocarbons, C10 aromatics, <1% naphthalene, ferrocene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hydrocarbons, C10 aromatics, <1% naphthalene, ferrocene)
Transport document description				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hydrocarbons, C10 aromatics, <1% naphthalene, ferrocene), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hydrocarbons, C10 aromatics, <1% naphthalene, ferrocene), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Hydrocarbons, C10 aromatics, <1% naphthalene, ferrocene), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hydrocarbons, C10 aromatics, <1% naphthalene, ferrocene), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hydrocarbons, C10 aromatics, <1% naphthalene, ferrocene), 9, III
14.3. Transport hazard class(es)				
9	9	9	9	9
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes EmS-No. (Fire): F-A EmS-No. (Spillage): S-F	Dangerous for the environment: 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)	:	-

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
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

Inland waterway transport

Classification code (ADN)	:	M6
Special provisions (ADN)	:	274, 335, 375, 601, 650
Limited quantities (ADN)	:	5 L
Excepted quantities (ADN)	:	E1
Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP
Number of blue cones/lights (ADN)	:	0

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

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 (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

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

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

Explosives Precursors Regulation (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)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ACGIH	American Conference of Government Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

Abbreviations and acronyms:	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function

Abbreviations and acronyms:	
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:gas)	Acute toxicity (inhalation:gas) 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 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Flam. Sol. 1	Flammable solids, Category 1
Met. Corr. 1	Corrosive to metals, Category 1
Repr. 1A	Reproductive toxicity, Category 1A
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
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.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

Full text of H- and EUH-statements:	
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

The classification complies with : ATP 12

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.