



VP R5.1

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.
Issue date: 08/10/2024 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Trade name : VP R5.1
Product code : 0166x

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Race fuel
Function or use category : For racing vehicle use only

1.2.2. Uses advised against

Restrictions on use : For professional users only

1.3. Details of the supplier of the safety data sheet

Supplier

VP Racing Fuels Europe GmbH
C/O Spaces Spindlershof
WallstraBe 9-13
10179 Berlin
Germany
T 302-540-2026
Compliance@vpracingfuels.com

1.4. Emergency telephone number

Emergency number : CHEMTREC
Ireland: +353 1 901 4670
United Kingdom: +44 20 3807 3798

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Cardiff Centre) University Hospital Llandough	Penlan Road CF64 2XX	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre	16/17 Framlington Place Newcastle-upon-Tyne NE2 4AB	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals
United Kingdom	NHS 111/NHS 24/NHS Direct		111 0845 4647	or call a doctor

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GB CLP (SI 2019:720 as amended)

Flammable liquids, Category 2

H225

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Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Germ cell mutagenicity, Category 1B	H340
Carcinogenicity, Category 1A	H350
Reproductive toxicity, Category 2	H361d
Specific target organ toxicity – Single exposure, Category 2	H371
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336
Specific target organ toxicity – Repeated exposure, Category 2	H373
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

Highly flammable liquid and vapour. Causes skin irritation. Causes serious eye irritation. May cause genetic defects. May cause cancer. Suspected of damaging the unborn child. May cause damage to organs. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to GB CLP (SI 2019:720 as amended)

Hazard pictograms (GB CLP)



Signal word (GB CLP)

: Danger

Contains

: Xylene; Ethylbenzene; 2,2,4-trimethylpentane; Cyclopentane; Isopentane; Toluene; 2,4,4-trimethylpentene; Cumene; Ethylcyclohexane; Decane; Benzene; 2-ethoxy-2-methylpropane; Methanol

Hazard statements (GB CLP)

: H225 - Highly flammable liquid and vapour.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.
H340 - May cause genetic defects.
H350 - May cause cancer.
H361d - Suspected of damaging the unborn child.
H371 - May cause damage to organs.
H373 - May cause damage to organs through prolonged or repeated exposure.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (GB CLP)

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing vapours.
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor.
P331 - Do NOT induce vomiting.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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+P311 - IF exposed or concerned: Call a POISON CENTER, doctor.
P332+P313 - If skin irritation occurs: Get medical advice, attention.
P337+P313 - If eye irritation persists: Get medical advice, attention.
P405 - Store locked up.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Extra phrases (GB CLP)

: Restricted to professional users.

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2.3. Other hazards

Component	
Substance(s) not meeting the PBT criteria of UK REACH regulation, in accordance with Annex XIII	Xylene (1330-20-7), Ethylbenzene (100-41-4), 2,2,4-trimethylpentane (540-84-1), Cyclopentane (287-92-3), Isopentane (78-78-4), Toluene (108-88-3), 2,4,4-trimethylpentene (25167-70-8), Cumene (98-82-8), Trans-bicyclo[4.4.0]decane (493-02-7), Heptylbenzene (1078-71-3), Ethylcyclohexane (1678-91-7), Decane (124-18-5), Butylbenzene (104-51-8), Octane (111-65-9), Nonane (111-84-2), n-heptane (142-82-5), 2,3-dimethylpentane (565-59-3), Benzene (71-43-2), n-hexane (110-54-3)(†), Cyclohexane (110-82-7), 2-ethoxy-2-methylpropane (637-92-3), Ethanol (64-17-5), 2-methylpropan-2-ol (75-65-0), Acetone (67-64-1), Butanone (78-93-3), Tert-butyl methyl ether (1634-04-4), Methanol (67-56-1)
Substance(s) not meeting the vPvB criteria of UK REACH regulation, in accordance with Annex XIII	Xylene (1330-20-7), Ethylbenzene (100-41-4), 2,2,4-trimethylpentane (540-84-1), Cyclopentane (287-92-3), Isopentane (78-78-4), Toluene (108-88-3), 2,4,4-trimethylpentene (25167-70-8), Cumene (98-82-8), Trans-bicyclo[4.4.0]decane (493-02-7), Heptylbenzene (1078-71-3), Ethylcyclohexane (1678-91-7), Decane (124-18-5), Butylbenzene (104-51-8), Octane (111-65-9), Nonane (111-84-2), n-heptane (142-82-5), 2,3-dimethylpentane (565-59-3), Benzene (71-43-2), n-hexane (110-54-3)(†), Cyclohexane (110-82-7), 2-ethoxy-2-methylpropane (637-92-3), Ethanol (64-17-5), 2-methylpropan-2-ol (75-65-0), Acetone (67-64-1), Butanone (78-93-3), Tert-butyl methyl ether (1634-04-4), Methanol (67-56-1)

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Labelling according to GB CLP (SI 2019:720 as amended)
Toluene	CAS-No.: 108-88-3 EC-No.: 203-625-9 UK Index-No.: 601-021-00-3	≥ 20 – < 25	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
Cyclopentane	CAS-No.: 287-92-3 EC-No.: 206-016-6 UK Index-No.: 601-030-00-2	≥ 10 – < 15	Flam. Liq. 2, H225 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
2-ethoxy-2-methylpropane	CAS-No.: 637-92-3 EC-No.: 211-309-7	≥ 10 – < 15	Flam. Liq. 2, H225 STOT SE 3, H336
2,2,4-trimethylpentane	CAS-No.: 540-84-1 EC-No.: 208-759-1 UK Index-No.: 601-009-00-8	≥ 5 – < 15	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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Name	Product identifier	%	Labelling according to GB CLP (SI 2019:720 as amended)
Xylene	CAS-No.: 1330-20-7 EC-No.: 215-535-7 UK Index-No.: 601-022-00-9	≥ 5 – < 10	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
Isopentane	CAS-No.: 78-78-4 EC-No.: 201-142-8 UK Index-No.: 601-085-00-2	≥ 5 – < 10	Flam. Liq. 1, H224 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066
2,4,4-trimethylpentene	CAS-No.: 25167-70-8 EC-No.: 246-690-9 UK Index-No.: 601-087-00-3	≥ 5 – < 10	Flam. Liq. 2, H225 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Ethylbenzene	CAS-No.: 100-41-4 EC-No.: 202-849-4 UK Index-No.: 601-023-00-4	≥ 1 – < 5	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) STOT RE 2, H373 Asp. Tox. 1, H304
Methanol	CAS-No.: 67-56-1 EC-No.: 200-659-6 UK Index-No.: 603-001-00-X	≥ 1 – ≤ 3	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 (ATE=100 mg/kg bodyweight) Acute Tox. 3 (Dermal), H311 (ATE=300 mg/kg bodyweight) Acute Tox. 3 (Inhalation), H331 (ATE=0.5 mg/l/4h) STOT SE 1, H370
Trans-bicyclo[4.4.0]decane	CAS-No.: 493-02-7 EC-No.: 207-771-4	≤ 1	Flam. Liq. 3, H226 Skin Corr. 1B, H314 Aquatic Chronic 4, H413
Heptylbenzene	CAS-No.: 1078-71-3 EC-No.: 214-084-3	≤ 1	Aquatic Acute 1, H400
Ethylcyclohexane	CAS-No.: 1678-91-7 EC-No.: 216-835-0	≤ 1	Flam. Liq. 2, H225 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Decane	CAS-No.: 124-18-5 EC-No.: 204-686-4	≤ 1	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 3, H412 EUH066
Cumene	CAS-No.: 98-82-8 EC-No.: 202-704-5 UK Index-No.: 601-024-00-X	< 1	Flam. Liq. 3, H226 Carc. 1B, H350 Asp. Tox. 1, H304 STOT SE 3, H335 Aquatic Chronic 2, H411

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Name	Product identifier	%	Labelling according to GB CLP (SI 2019:720 as amended)
Ethanol	CAS-No.: 64-17-5 EC-No.: 200-578-6 UK Index-No.: 603-002-00-5	< 1	Flam. Liq. 2, H225 Eye Irrit. 2, H319
2-methylpropan-2-ol	CAS-No.: 75-65-0 EC-No.: 200-889-7 UK Index-No.: 603-005-00-1	< 1	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Eye Irrit. 2, H319 STOT SE 3, H335
Butylbenzene	CAS-No.: 104-51-8 EC-No.: 203-209-7	< 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Octane	CAS-No.: 111-65-9 EC-No.: 203-892-1 UK Index-No.: 601-009-00-8	< 0,5	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Nonane	CAS-No.: 111-84-2 EC-No.: 203-913-4	< 0,5	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Benzene	CAS-No.: 71-43-2 EC-No.: 200-753-7 UK Index-No.: 601-020-00-8	< 0,5	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Muta. 1B, H340 Carc. 1A, H350 STOT RE 1, H372 Asp. Tox. 1, H304
n-heptane	CAS-No.: 142-82-5 EC-No.: 205-563-8 UK Index-No.: 601-008-00-2	< 0,5	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3-dimethylpentane	CAS-No.: 565-59-3 EC-No.: 209-280-0 UK Index-No.: 601-008-00-2	< 0,5	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Acetone	CAS-No.: 67-64-1 EC-No.: 200-662-2 UK Index-No.: 606-001-00-8	< 0,5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066

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Name	Product identifier	%	Labelling according to GB CLP (SI 2019:720 as amended)
Butanone	CAS-No.: 78-93-3 EC-No.: 201-159-0 UK Index-No.: 606-002-00-3	< 0,5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
Tert-butyl methyl ether	CAS-No.: 1634-04-4 EC-No.: 216-653-1 UK Index-No.: 603-181-00-X	< 0,5	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 2, H371 STOT SE 3, H336
Cyclohexane	CAS-No.: 110-82-7 EC-No.: 203-806-2 UK Index-No.: 601-017-00-1	< 0,5	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
n-hexane	CAS-No.: 110-54-3 EC-No.: 203-777-6 UK Index-No.: 601-037-00-0	< 0,1	Flam. Liq. 2, H225 Repr. 2, H361f Asp. Tox. 1, H304 STOT RE 2, H373 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
Ethanol	CAS-No.: 64-17-5 EC-No.: 200-578-6 UK Index-No.: 603-002-00-5	(50 ≤ C < 100) Eye Irrit. 2; H319
n-hexane	CAS-No.: 110-54-3 EC-No.: 203-777-6 UK Index-No.: 601-037-00-0	(5 ≤ C ≤ 100) STOT RE 2; H373

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 medical advice is needed, have product container or label at hand.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell. Give oxygen or artificial respiration if necessary.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person.

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

Symptoms/effects	: May cause damage to organs.
Symptoms/effects after inhalation	: May cause drowsiness or dizziness. At high concentrations, the vapours can be irritating to the respiratory system.
Symptoms/effects after skin contact	: Causes skin irritation. Redness. Itching. Swelling.
Symptoms/effects after eye contact	: Causes serious eye irritation. Redness. Itching. Lacrimation. Blurred vision.

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Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. Aspiration of the product into the lungs may cause very serious pneumonia. Ingestion may cause nausea, vomiting and diarrhea. Abdominal pain.
Chronic symptoms	: May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Symptoms may be delayed. Keep under medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Dry chemical, CO ₂ , dry sand, or alcohol-resistant foam. Use extinguishing agent suitable for surrounding fire.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapour. Burning produces irritating, toxic and noxious fumes. In case of fire and/or explosion do not breathe fumes. Heating will cause a rise in pressure with a risk of bursting.
Hazardous decomposition products in case of fire	: Toxic fumes may be released. Carbon dioxide. Carbon monoxide. Nitrogen oxides.

5.3. Advice for firefighters

Firefighting instructions	: Evacuate the danger area. Move containers from fire area if it can be done without personal risk. Fight fire from safe distance and protected location. Use water spray or fog for cooling exposed containers. Use extinguishing media appropriate for surrounding fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: No flames, no sparks. Eliminate all sources of ignition. Use special care to avoid static electric charges. Avoid contact with skin, eyes and clothing.
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6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Evacuate unnecessary personnel. Ventilate spillage area. Avoid breathing vapours. Do not get in eyes, on skin, or on clothing. Avoid contact with skin and eyes. Do not touch or walk on the spilled product. No action shall be taken without appropriate training or involving any personal risk.

6.1.2. 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.

6.2. Environmental precautions

Avoid release to the environment. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Stop leak if safe to do so. Collect spillage. Do not touch or walk on the spilled product.
Methods for cleaning up	: Caution : this product can cause the floor to be slippery. Move containers from spill area. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal.

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Methods for cleaning up	: Do not absorb with saw-dust or any other combustible absorbent material. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). Clean contaminated surfaces with an excess of water. Prevent entry to sewers and public waters. Never return unused material to original container. Use non-sparking tools.
Other information	: Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques.

6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Provide local exhaust or general room ventilation. Avoid breathing vapours. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid contact during pregnancy and while nursing. Avoid release to the environment. Keep only in original container. Empty containers retain product residue and can be hazardous. Do not re-use container for any purpose. Eliminate all ignition sources if safe to do so. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Use approved electrical and mechanical equipment in accordance with respective zone.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in dry, cool, well-ventilated area. Keep away from food, drink and animal feedingstuffs. Keep container closed when not in use. Containers which are opened should be properly resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Store in accordance with local, regional, national or international regulation. Keep away from ignition sources (including static discharges). Proper grounding procedures to avoid static electricity should be followed.
Incompatible products	: Oxidizing agent.
Incompatible materials	: Direct sunlight. Heat sources. Ignition sources.
Storage area	: Store in a well-ventilated place.

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

Xylene (1330-20-7)	
United Kingdom - Occupational Exposure Limits	
Local name	Xylene
WEL TWA (OEL TWA)	220 mg/m ³ o-,m-,p- or mixed isomers
	50 ppm o-,m-,p- or mixed isomers
WEL STEL (OEL STEL)	441 mg/m ³ o-,m-,p- or mixed isomers
	100 ppm o-,m-,p- or mixed isomers

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Xylene (1330-20-7)	
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
United Kingdom - Biological limit values	
Local name	Xylene, o-, m-, p- or mixed isomers
BMGV	650 mmol/mol Creatinine Parameter: methyl hippuric acid - Medium: urine - Sampling time: Post shift
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Ethylbenzene (100-41-4)	
United Kingdom - Occupational Exposure Limits	
Local name	Ethylbenzene
WEL TWA (OEL TWA)	441 mg/m ³
	100 ppm
WEL STEL (OEL STEL)	552 mg/m ³
	125 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Isopentane (78-78-4)	
United Kingdom - Occupational Exposure Limits	
Local name	Isopentane
WEL TWA (OEL TWA)	1800 mg/m ³
	600 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Toluene (108-88-3)	
United Kingdom - Occupational Exposure Limits	
Local name	Toluene
WEL TWA (OEL TWA)	191 mg/m ³
	50 ppm
WEL STEL (OEL STEL)	384 mg/m ³
	100 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Cumene (98-82-8)	
United Kingdom - Occupational Exposure Limits	
Local name	Cumene
WEL TWA (OEL TWA)	125 mg/m ³
	25 ppm
WEL STEL (OEL STEL)	250 mg/m ³

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Cumene (98-82-8)	
	50 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
n-heptane (142-82-5)	
United Kingdom - Occupational Exposure Limits	
Local name	n-Heptane
WEL TWA (OEL TWA)	2085 mg/m ³
	500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Benzene (71-43-2)	
United Kingdom - Occupational Exposure Limits	
Local name	Benzene
WEL TWA (OEL TWA)	3.25 mg/m ³
	1 ppm
Remark	Carc (Capable of causing cancer and/or heritable genetic damage), Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
n-hexane (110-54-3)	
United Kingdom - Occupational Exposure Limits	
Local name	n-Hexane
WEL TWA (OEL TWA)	72 mg/m ³
	20 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Cyclohexane (110-82-7)	
United Kingdom - Occupational Exposure Limits	
Local name	Cyclohexane
WEL TWA (OEL TWA)	350 mg/m ³
	100 ppm
WEL STEL (OEL STEL)	1050 mg/m ³
	300 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Ethanol (64-17-5)	
United Kingdom - Occupational Exposure Limits	
Local name	Ethanol
WEL TWA (OEL TWA)	1920 mg/m ³
	1000 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

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2-methylpropan-2-ol (75-65-0)	
United Kingdom - Occupational Exposure Limits	
Local name	2-Methylpropan-2-ol
WEL TWA (OEL TWA)	308 mg/m ³
	100 ppm
WEL STEL (OEL STEL)	462 mg/m ³
	150 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Acetone (67-64-1)	
United Kingdom - Occupational Exposure Limits	
Local name	Acetone
WEL TWA (OEL TWA)	1210 mg/m ³
	500 ppm
WEL STEL (OEL STEL)	3620 mg/m ³
	1500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Butanone (78-93-3)	
United Kingdom - Occupational Exposure Limits	
Local name	Butan-2-one (methyl ethyl ketone)
WEL TWA (OEL TWA)	600 mg/m ³
	200 ppm
WEL STEL (OEL STEL)	899 mg/m ³
	300 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
United Kingdom - Biological limit values	
Local name	Butan-2-one (methyl ethyl ketone)
BMGV	70 µmol/l Parameter: butan-2-one - Medium: urine - Sampling time: Post shift
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Tert-butyl methyl ether (1634-04-4)	
United Kingdom - Occupational Exposure Limits	
Local name	Methyl-tert-butyl-ether (Tertiary-butyl-methyl-ether)
WEL TWA (OEL TWA)	183.5 mg/m ³
	50 ppm
WEL STEL (OEL STEL)	367 mg/m ³
	100 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

Methanol (67-56-1)	
United Kingdom - Occupational Exposure Limits	
Local name	Methanol
WEL TWA (OEL TWA)	266 mg/m ³
	200 ppm
WEL STEL (OEL STEL)	333 mg/m ³
	250 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

Monitoring methods	
Monitoring methods	Refer to all applicable national, international and local regulations or provisions. Workplace atmospheres. Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy. Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. Workplace exposure - General requirements for the performance of procedures for the measurement of chemical agents.

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

Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety procedures. Provide local exhaust or general room ventilation. Avoid all unnecessary exposure. Ensure exposure is below occupational exposure limits (where available). Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses. ISO 16321-1

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing. Skin protection appropriate to the conditions of use should be provided

Hand protection:

Chemical resistant gloves (according to European standard ISO 374-1 or equivalent). Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Since the product consists of several substances, the durability of the glove material cannot be estimated and needs to be tested before use

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment. Prevent entry to sewers and public waters. Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear.
Colour	: Colourless.
Odour	: Aromatic. Petroleum-like odour.
Odour threshold	: Not available
pH	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: > 35 °C (calculated value)
Flash point	: < 23 °C (calculated value)
Explosive limits	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Relative vapour density at 20°C	: Not available
Relative density	: 0.7815
Density	: Not available
Solubility	: Insoluble.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
Viscosity, kinematic	: < 20.5 mm²/s (40 °C)
Explosive properties	: Not available

9.2. Other information

Particle characteristics	: Not applicable
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SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour. Vapours can form explosive mixtures with air. Heating may cause a fire or explosion.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hazardous polymerisation: Will not occur.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Protect from sunlight. Overheating. Heat and ignition sources. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

VP R5.1

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

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 toxicological effects

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Xylene (1330-20-7)

LD50 oral rat	4300 mg/kg
LC50 Inhalation - Rat [ppm]	5000 ppm/4h

Ethylbenzene (100-41-4)

LD50 oral rat	3500 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat [ppm]	4000 ppm

2,2,4-trimethylpentane (540-84-1)

LD50 oral rat	> 2500 mg/kg
LC50 Inhalation - Rat	47.4 mg/l (1 h)

Toluene (108-88-3)

LD50 oral rat	2600 – 2750 mg/kg
LD50 dermal rabbit	≥ 12124 mg/kg
LC50 Inhalation - Rat [ppm]	8000 ppm/4h

2,4,4-trimethylpentene (25167-70-8)

LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat [ppm]	> 4185 ppm/4h

Cumene (98-82-8)

LC50 Inhalation - Rat	39000 mg/m ³ (4 h)
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Decane (124-18-5)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg

Benzene (71-43-2)

LD50 dermal rabbit	> 2500 mg/kg
LC50 Inhalation - Rat	44.66 mg/l/4h

2-ethoxy-2-methylpropane (637-92-3)

LD50 oral rat	> 2003 mg/kg (OECD 401)
LD50 dermal rabbit	> 2000 mg/kg

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

2-ethoxy-2-methylpropane (637-92-3)	
LC50 Inhalation - Rat	> 5.88 mg/l/4h
Ethanol (64-17-5)	
LD50 oral rat	> 7692 mg/kg
LD50 dermal rabbit	> 15800 mg/kg
LC50 Inhalation - Rat	124.7 mg/l/4h
2-methylpropan-2-ol (75-65-0)	
LD50 oral rat	3046 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat	36 mg/l/4h
Acetone (67-64-1)	
LD50 oral rat	5800 mg/kg
LD50 dermal rabbit	> 7426 mg/kg (guinea pig)
LC50 Inhalation - Rat [ppm]	32000 ppm (4 h)
Tert-butyl methyl ether (1634-04-4)	
LD50 oral rat	4000 mg/kg
LC50 Inhalation - Rat [ppm]	23576 ppm/4h
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: Suspected of damaging the unborn child.
STOT-single exposure	: May cause damage to organs. May cause drowsiness or dizziness.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: May be fatal if swallowed and enters airways.
VP R5.1	
Viscosity, kinematic	< 20.5 mm ² /s (40 °C)

11.2. Information on other hazards

11.2.1. 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 UK 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 GB BPR and GB PPP at a concentration equal to or greater than 0,1 %

11.2.2. Other information

Other information : No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified (Based on available data, the classification criteria are not met)

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

VP R5.1

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

Additional information : No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation.

Xylene (1330-20-7)	
LC50 - Fish [1]	3.3 mg/l (96 h)
LC50 - Fish [2]	13.4 mg/l (96 h, Pimephales promelas)
EC50 - Crustacea [1]	8.5 mg/l (48 h, Palaemonetes pugio)
Ethylbenzene (100-41-4)	
LC50 - Fish [1]	4.2 mg/l (96 h, Oncorhynchus mykiss)
EC50 - Crustacea [1]	2.93 mg/l (48 h, Daphnia magna)
EC50 - Crustacea [2]	6.53 mg/l (48 h, Artemia sp.)
EC50 72h - Algae [1]	4.9 mg/l (72 h, Skeletonema costatum)
EC50 96h - Algae [1]	7.7 mg/l (96 h, Skeletonema costatum)
2,2,4-trimethylpentane (540-84-1)	
LC50 - Fish [1]	0.11 mg/l (96 h, Oncorhynchus mykiss)
EC50 - Crustacea [1]	0.4 mg/l (48 h, Daphnia magna)
EC50 72h - Algae [1]	2.943 mg/l
NOEC chronic crustacea	0.17 mg/l (21 d, Daphnia magna)
Toluene (108-88-3)	
LC50 - Fish [1]	8.48 mg/l (96 h)
EC50 - Crustacea [1]	9.83 mg/l (48 h)
2,4,4-trimethylpentene (25167-70-8)	
LC50 - Fish [1]	> 1.55 mg/l (96 h)
EC50 - Crustacea [1]	> 3.1 mg/l (48 h)
EC50 72h - Algae [1]	> 19.2 mg/l (72 h)
2-ethoxy-2-methylpropane (637-92-3)	
LC50 - Fish [1]	> 974 mg/l (96 h, Poecilia reticulata)
LC50 - Fish [2]	574 (96 h, Menidia beryllina)
EC50 - Crustacea [1]	110 mg/l (48 h, Daphnia magna)
EC50 - Crustacea [2]	37 mg/l (96 h, Americamysis bahia)
EC50 72h - Algae [1]	1100 mg/l (72 h, Pseudokirchneriella subcapitata)
NOEC chronic fish	64 mg/l (5 d, Danio rerio)
NOEC chronic crustacea	51 mg/l (21 d, Daphnia magna)
NOEC chronic algae	7.5 mg/l (72 h, Pseudokirchneriella subcapitata)
Ethanol (64-17-5)	
LC50 - Fish [1]	11200 mg/l (24 h, Oncorhynchus mykiss)
EC50 - Crustacea [1]	5012 mg/l (48 h, Ceriodaphnia dubia):)
EC50 72h - Algae [1]	275 mg/l (72 h, Chlorella vulgaris)
NOEC chronic fish	250 mg/l (120 h, Danio rerio)
NOEC chronic crustacea	9.6 mg/l (10 d, Ceriodaphnia dubia)

VP R5.1

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

Ethanol (64-17-5)	
NOEC chronic algae	6500 mg/l (16 h, <i>Pseudomonas putida</i>)
2-methylpropan-2-ol (75-65-0)	
LC50 - Fish [1]	> 961 mg/l (96 h, <i>Pimephales promelas</i>)
EC50 - Crustacea [1]	933 mg/l (48 h, <i>Daphnia magna</i>)
EC50 72h - Algae [1]	976 mg/l (72 h, <i>Pseudokirchneriella subcapitata</i>)
NOEC chronic fish	332 mg/l (4 d, <i>Clarias gariepinus</i>)
NOEC chronic crustacea	100 mg/l (21 d, <i>Daphnia magna</i>)
NOEC chronic algae	10000 mg/l (48 h, <i>Pseudomonas putida</i>)
Acetone (67-64-1)	
LC50 - Fish [1]	5540 mg/l (96 h, <i>Oncorhynchus mykiss</i>)
LC50 - Fish [2]	8300 mg/l (96 h, <i>Lepomis macrochirus</i>)
EC50 - Crustacea [1]	12600 – 12700 mg/l (48 h, <i>Daphnia magna</i>)
EC50 - Other aquatic organisms [1]	14500 mg/l (15 min., <i>Photobacterium phosphoreum</i>)
EC50 72h - Algae [1]	3020 mg/l (14 d, <i>Chlorella pyrenoidosa</i>)
Tert-butyl methyl ether (1634-04-4)	
LC50 - Fish [1]	672 mg/l (96 h)
Methanol (67-56-1)	
LC50 - Fish [1]	29.4 mg/l (96 h, <i>Pimephales promelas</i>)
EC50 - Crustacea [1]	22200 mg/l (48 h, <i>Daphnia magna</i>)
12.2. Persistence and degradability	
VP R5.1	
Persistence and degradability	Biodegradability in water: no data available.
12.3. Bioaccumulative potential	
VP R5.1	
Bioaccumulative potential	No data available concerning bioaccumulation.
Xylene (1330-20-7)	
BCF - Fish [1]	8.1 – 25.9
Partition coefficient n-octanol/water (Log Pow)	3.12 – 3.2
Ethylbenzene (100-41-4)	
Partition coefficient n-octanol/water (Log Pow)	3.15
2,4,4-trimethylpentene (25167-70-8)	
BCF - Fish [1]	2.8 – 4.5
Partition coefficient n-octanol/water (Log Pow)	4.12 – 9.91
Partition coefficient n-octanol/water (Log Kow)	3.44 – 8.13
2-ethoxy-2-methylpropane (637-92-3)	
Partition coefficient n-octanol/water (Log Pow)	1.48 (25 °C)

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

Ethanol (64-17-5)	
Partition coefficient n-octanol/water (Log Pow)	-0.35 (pH=7.4; 24 °C)

12.4. Mobility in soil

VP R5.1	
Ecology - soil	No additional information available.

12.5. Results of PBT and vPvB assessment

Component	
Xylene (1330-20-7)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
Ethylbenzene (100-41-4)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
2,2,4-trimethylpentane (540-84-1)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
Cyclopentane (287-92-3)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
Isopentane (78-78-4)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
Toluene (108-88-3)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
2,4,4-trimethylpentene (25167-70-8)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
Cumene (98-82-8)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
Trans-bicyclo[4.4.0]decane (493-02-7)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
Heptylbenzene (1078-71-3)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

Component	
Ethylcyclohexane (1678-91-7)	This product does not contain substances at $\geq 0.1\%$ that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at $\geq 0.1\%$ that meet the vPvB criteria of UK REACH regulation, annex XIII
Decane (124-18-5)	This product does not contain substances at $\geq 0.1\%$ that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at $\geq 0.1\%$ that meet the vPvB criteria of UK REACH regulation, annex XIII
Butylbenzene (104-51-8)	This product does not contain substances at $\geq 0.1\%$ that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at $\geq 0.1\%$ that meet the vPvB criteria of UK REACH regulation, annex XIII
Octane (111-65-9)	This product does not contain substances at $\geq 0.1\%$ that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at $\geq 0.1\%$ that meet the vPvB criteria of UK REACH regulation, annex XIII
Nonane (111-84-2)	This product does not contain substances at $\geq 0.1\%$ that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at $\geq 0.1\%$ that meet the vPvB criteria of UK REACH regulation, annex XIII
n-heptane (142-82-5)	This product does not contain substances at $\geq 0.1\%$ that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at $\geq 0.1\%$ that meet the vPvB criteria of UK REACH regulation, annex XIII
2,3-dimethylpentane (565-59-3)	This product does not contain substances at $\geq 0.1\%$ that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at $\geq 0.1\%$ that meet the vPvB criteria of UK REACH regulation, annex XIII
Benzene (71-43-2)	This product does not contain substances at $\geq 0.1\%$ that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at $\geq 0.1\%$ that meet the vPvB criteria of UK REACH regulation, annex XIII
n-hexane (110-54-3)	This product does not contain substances at $\geq 0.1\%$ that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at $\geq 0.1\%$ that meet the vPvB criteria of UK REACH regulation, annex XIII
Cyclohexane (110-82-7)	This product does not contain substances at $\geq 0.1\%$ that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at $\geq 0.1\%$ that meet the vPvB criteria of UK REACH regulation, annex XIII
2-ethoxy-2-methylpropane (637-92-3)	This product does not contain substances at $\geq 0.1\%$ that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at $\geq 0.1\%$ that meet the vPvB criteria of UK REACH regulation, annex XIII
Ethanol (64-17-5)	This product does not contain substances at $\geq 0.1\%$ that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at $\geq 0.1\%$ that meet the vPvB criteria of UK REACH regulation, annex XIII
2-methylpropan-2-ol (75-65-0)	This product does not contain substances at $\geq 0.1\%$ that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at $\geq 0.1\%$ that meet the vPvB criteria of UK REACH regulation, annex XIII

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

Component	
Acetone (67-64-1)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
Butanone (78-93-3)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
Tert-butyl methyl ether (1634-04-4)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
Methanol (67-56-1)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects	: No other effects known.
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 UK 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 GB BPR and GB PPP at a concentration equal to or greater than 0,1 %.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Empty containers retain product residue and can be hazardous.
Additional information	: Do not re-use empty containers. Flammable vapours may accumulate in the container. Do not puncture or incinerate, even when empty.
Ecological waste information	: Avoid release to the environment.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 1203	UN 1203	UN 1203	UN 1203	UN 1203
14.2. UN proper shipping name				
GASOLINE	GASOLINE	Gasoline	GASOLINE	GASOLINE
14.3. Transport hazard class(es)				
3	3	3	3	3
				

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Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

ADR	IMDG	IATA	ADN	RID
14.4. Packing group				
II	II	II	II	II
14.5. Environmental hazards				
Dangerous for the environment: True	Dangerous for the environment: True Marine pollutant: Yes	Dangerous for the environment: True	Dangerous for the environment: True	Dangerous for the environment: True
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: F1
Special provisions (ADR)	: 243, 534, 664
Limited quantities (ADR)	: 1I
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02, R001
Special packing provisions (ADR)	: BB2
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1
Tank code (ADR)	: LGBF
Tank special provisions (ADR)	: TU9
Vehicle for tank carriage	: FL
Transport category (ADR)	: 2
Special provisions for carriage - Operation (ADR)	: S2, S20
Hazard identification number (Kemler No.)	: 33
Orange plates	: 
Tunnel restriction code (ADR)	: D/E
EAC code	: 3YE

Transport by sea

Special provisions (IMDG)	: 243
Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-E
Stowage category (IMDG)	: E
Properties and observations (IMDG)	: Immiscible with water.

Air transport

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 353
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 364
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A100
ERG code (IATA)	: 3H

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Safety Data Sheet

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Inland waterway transport

Classification code (ADN)	: F1
Special provisions (ADN)	: 243, 534
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 1

Rail transport

Classification code (RID)	: F1
Special provisions (RID)	: 243, 534
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02, R001
Special packing provisions (RID)	: BB2
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1
Tank codes for RID tanks (RID)	: LGBF
Special provisions for RID tanks (RID)	: TU9
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE7
Hazard identification number (RID)	: 33

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

UK REACH Annex XVII (Restriction List)

This product contains no substance(s) listed on UK REACH Annex XVII (Restriction List) equal to or above the level of SDS disclosure

UK REACH Annex XIV (Authorisation List)

This product contains no substance(s) listed on UK REACH Annex XIV (Authorisation List) equal to or above the 0.1% level of disclosure

UK REACH Candidate List (SVHC)

Contains no substance(s) listed on the UK REACH Candidate List

GB PIC regulation (Prior Informed Consent)

This product contains substance(s) listed on the GB PIC List equal to or above the level of SDS disclosure (Benzene - 71-43-2, Annex I Part 1)

POP Regulation (Persistent Organic Pollutants)

This product contains no substance(s) listed on the GB POP List equal to or above the level of SDS disclosure

Ozone Regulation (S.I. No. 168 of 2015)

This product contains no substance(s) listed on the GB Ozone Depletion List equal to or above the level of SDS disclosure

Control of Poisons and Explosives Precursors Act

This product contains no substance(s) listed as a reportable poison on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure

This product contains no substance(s) listed as a regulated poison on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure

This product contains substance(s) listed on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure: Acetone - 67-64-1

This substance is not listed as a regulated poison on the Control of Poisons and Explosives Precursors Regulations

VP R5.1

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

Drug Precursors Regulation (273/2004)

This product contains substance(s) listed on the GB Drug Precursors List equal to or above the level of SDS disclosure (Toluene - 108-88-3), (Acetone - 67-64-1), (Methylethylketone - 78-93-3)

15.1.2. Other information

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : ECHA (European Chemicals Agency). CLP Regulation (EC) No 1272/2008, as retained and amended in UK law. Supplier's safety documents.

Training advice : Training staff on good practice.

Full text of H- and EUH-statements:	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), 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
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 1	Flammable liquids, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

VP R5.1

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

Full text of H- and EUH-statements:	
H361d	Suspected of damaging the unborn child.
H370	Causes damage to organs.
H371	May cause damage to organs.
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. 2	Reproductive toxicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 1	Specific target organ toxicity – single exposure, Category 1
STOT SE 2	Specific target organ toxicity – Single exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Flam. Liq. 2	H225	Weight of evidence
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Muta. 1B	H340	Calculation method
Carc. 1A	H350	Calculation method
Repr. 2	H361d	Calculation method
STOT SE 2	H371	Calculation method
STOT SE 3	H336	Calculation method
STOT RE 2	H373	Calculation method
Asp. Tox. 1	H304	Weight of evidence
Aquatic Chronic 2	H411	Calculation method

Safety Data Sheet (SDS), UK

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.