Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH)

XO1498HO Premium Heating Oil Additive - Green

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

1.1 Product identifier

Product name: XO1498HO Premium Heating Oil Additive - Green

Trade name(s): Premium Heating Oil Additive - Green (XO1498HO)
PHO99 Premium Heating Oil Additive - Green

Product description: Liquid fuel additive.

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

Identified use(s): Liquid fuel additive.

Uses advised against: Follow supplier's recommendations on correct use of the product.

1.3 Details of the supplier of the safety data sheet

Distributor/Supplier:
Rix Petroleum Limited
2 Humber Quays,
Wellington Street West,
Hull, HU1 2BN

Telephone: 01482 224422

E-mail: sales@rix.co.uk

1.4 Emergency telephone number

In case of emergency, call: 0333 333 9962 (24 hours, 7 days)

SECTION 2: Hazard Identification

2.1 Classification of the substance or mixture

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

Asp. Tox. 1; H304
Skin Irrit. 2; H315
Skin Sens. 1; H317
Eye Dam. 1; H318
STOT SE 3; H336

Carc. 2; H351
Aquatic Chronic 2; H411

2.1.2. Classification according to Directive 67/548/EEC & Directive 1999/45/EC

Irritant; Xi; R36/38
Carc. Cat. 3; R40
Irritant; Xi; R43
Harmful; Xn; R65
R66
R67
Dangerous for the environment; N; R51/53

2.2 Label elements

2.2.1. Label according to Regulation (EC) No. 1272/2008 (CLP)

Hazard pictogram(s):



Signal Word: Danger.

Hazard Statement(s):

H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H336: May cause drowsiness or dizziness.
H351: Suspected of causing cancer.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statement(s):

P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor/physician.
P331: Do NOT induce vomiting.
P405: Store locked up.

P501: Dispose of contents/container to: disposal should be in accordance with local, state or national legislation.

Supplemental Hazard information (EU): None.

2.3 Other hazards

The product does not contain substances assessed to be PBT or vPvB.

SECTION 3: Composition

3.2 Mixtures

Chemical name	% w/w	CAS No.	EC No.	Index No.	Classification (Regulation (EC) No. 1272/2008 (CLP))	Classification (Directive 67/548/EEC)
Hydrocarbons, C10, aromatics, >1% naphthalene *REACH: 01-2119463588-24-XXXX*	30-80	-	919-284-0	-	Asp. Tox. 1; H304 Carc. 2; H351 STOT SE 3; H336 Aquatic Chronic 2; H411 EUH066	Carc. Cat. 3; R40 Xn; R65 R66 R67 N; R51/53
Xylene	5-15	1330-20-7	215-535-7	601-022-00-9	Flam. Liq. 3, H226 Asp. Tox. 1; H304 Acute Tox. 4; H312 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 STOT RE 2; H373	R10 Xn; R20/21 Xi; R36/37/38 Xn; R65
α,α'-Propylenedinitrilodi-*o*-cresol	5-10	94-91-7	202-374-2	-	Acute Tox. 4; H302 Skin Sens. 1; H317 Eye Irrit. 2; H319 Aquatic Chronic 3; H412	Xn; R22 Xi; R36/38, R43 R52/53
Reaction mass of 2,6-di-*tert*-butylphenol and 2,4,6-tri-*tert*-butylphenol *REACH: 01-2119538013-51-XXXX*	3-5	-	907-745-9	-	Eye Dam. 1; H318 Aquatic Chronic 1; H410	Xi; R41 N; R50/53
Amine/aldehyde condensation products	1-3	-	-	-	Acute Tox. 4 H302 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332	Xn; R20/21/22 Xi; R36/38
Hydrocarbons, C10-13, aromatics, >1% naphthalene *REACH: 01-2119451151-53-XXXX*	1-3	-	926-273-4	-	Asp. Tox. 1; H304 Carc. 2; H351 Aquatic Chronic 2; H411 EUH066	Carc. Cat. 3; R40 Xn; R65 R66 N; R51/53

Chemical name	% w/w	CAS No.	EC No.	Index No.	Classification (Regulation (EC) No. 1272/2008 (CLP))	Classification (Directive 67/548/EEC)
Ethylbenzene	1-3	100-41-4	202-849-4	601-023-00-4	Flam. Liq. 2, H225 Asp. Tox. 1; H304 Acute Tox. 4; H332 STOT RE 2; H373 (hearing organs) Aquatic Chronic 3; H412	F; R11 Xn; R20 Xn; R48/20 Xn; R65 R52/53
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	1-3	-	918-481-9	-	Asp. Tox.1 ; H304 EUH066	Xn; R65 R66
Solvent naphtha (petroleum), heavy arom.	1-3	64742-94-5	265-198-5	649-424-00-3	Skin Irrit. 2; H315 Asp. Tox. 1; H304 Aquatic Chronic 2; H411	Xi; R38 Xn; R65 N; R51/53
2-Ethylhexan-1-ol	1-3	104-76-7	203-234-3	-	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335	Xn; R20 Xi; R36/37/38
Butanedioic acid, polyisobutenyl polymer	1-3	-	-	-	Skin Irrit. 2; H315	Xi: R38
Hydrocarbons, C10-13, aromatics, >1% naphthalene	< 1	-	926-273-4	-	Asp. Tox. 1; H304 Carc. 2; H351 Aquatic Chronic 2; H411 EUH066	Carc. Cat. 3; R40 Xn; R65 R66 N; R51/53
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics *REACH: 01-2119456620-43-XXXX*	< 1	-	926-141-6	-	Acute Tox. 4; H302 Acute Tox. 4; H312 Acute Tox. 4; H332 Skin Corr. 1B; H314 Eye Irrit. 2; H319 Aquatic Chronic 2; H411	Xn; R21/22 C; R34 N; R51/53
1,2,4-Trimethylbenzene	< 1	95-63-6	202-436-9	601-043-00-3	Flam Liq. 3; H226 Asp. Tox. 1; H304 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332 STOT SE 3; H335 Aquatic Chronic 2; H411	R10 Xn; R20 Xi; R36/37/38 Xn; R65 N; R51/53
Naphthalene	< 1	91-20-3	202-049-5	601-052-00-2	Acute Tox 4; H302 Carc. 2; H351 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	Xn; R22 Carc. Cat. 3; R40 N; R50/53

See Section 16 for full description of R phrases and H statements.

SECTION 4: First Aid Measures

4.1 Description of first aid measures

INHALATION: Remove person to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, get medical advice/attention.

SKIN CONTACT: Remove contaminated clothing immediately. Wash with plenty of soap and

water. Take off contaminated clothing and wash before reuse. If irritation or rash develops and persists, get medical advice/attention.

EYE CONTACT: Obtain immediate medical attention. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing making sure to rinse under eyelids.

INGESTION: Obtain immediate medical attention. Do not induce vomiting. If vomiting occurs, the head should be kept low to avoid vomit entering the lungs. Provided the patient is conscious wash mouth out with water and provide patient with 200-300 mL of water to drink. Never give anything by mouth to an unconscious person.

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

Skin contact causes irritation, redness and pain. Repeated exposure may cause skin dryness or cracking. May cause an allergic skin reaction. Eye contact causes burns, watering, redness and pain. Inhalation of vapours may cause drowsiness or dizziness. If swallowed, aspiration into lungs may result in chemical pneumonia. Ingestion may cause discomfort and irritation to the mouth and gastrointestinal tract.

Suspected of causing cancer.

4.3 Indication of any immediate medical attention and special treatments needed:

In case of accident or if patient feels unwell, seek medical advice immediately. If swallowed, patient should be monitored for signs of breathing difficulty as effects of aspiration may be delayed for up to 48 hours. If breathing is laboured, oxygen should be administered by qualified personnel.

SECTION 5: Fire-fighting Measures

5.1 Extinguishing Media

Suitable extinguishing media:	Foam, CO2 or dry powder. For large fires, use water spray.
Unsuitable extinguishing media:	Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Combustible liquid and vapour: Vapour may form explosive mixture with air. Vapour is heavier than air and may accumulate in confined spaces. Containers exposed to heat may burst due to increase in pressure.

Combustion may liberate toxic fumes: Carbon monoxide, carbon dioxide, nitrogen oxides, various hydrocarbons.

5.3 Advice for fire-fighters

A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Move undamaged containers from fire area if this can be done safely. Keep fire exposed containers cool by spraying with water. Do not allow product or run-off to enter drains, sewers or watercourses.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Eliminate sources of ignition. Ensure adequate ventilation. Evacuate area and keep upwind. Avoid contact with skin, eyes or clothing. Avoid breathing vapours/spray. Wear suitable personal protective equipment. Wear appropriate respirator when ventilation is inadequate. (See Section 8).

6.1.2 For emergency responders

Keep unnecessary personnel away. Wear suitable protective clothing (See Section 8). Contaminated clothing should be thoroughly cleaned. Contaminated work clothing should not be allowed out of the workplace.

6.2 Environmental precautions

Collect spillage. Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

6.3 Methods and materials for containment and clearing up

6.3.1 For containment

Stop the leak if it is safe to do so. Contain the spillage with sand, earth or any suitable adsorbent material.

6.3.2 For cleaning up

Use sand, earth or any suitable non-combustible adsorbent material to adsorb spillages. Using non-sparking tools transfer the contaminated absorbent material into a container for disposal. The containers used should be plastic-lined sealable drums. Containers should be sealed before being disposed of via an authorised waste disposal contractor.

6.3.3 Other advice

None.

6.4 Reference to other sections

See Section 8 for personal protective equipment. See Section 13 for waste disposal.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Provide adequate ventilation, including local extraction, to ensure occupational exposure limits are not exceeded. Avoid breathing vapours/spray. Avoid contact with skin, eyes or clothing. Wear suitable personal protective equipment (See Section 8).

Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Contaminated clothing should be thoroughly cleaned or disposed of as hazardous waste.

7.2 Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Protect from direct sunlight. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Store only in the original container. Empty containers retain product residue and can be hazardous.

Keep away from oxidising agents.

7.3 Specific end uses(s)

Liquid fuel additive.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Workplace exposure limits

Source: EH40/2005, 2nd Ed., 2011.

Substance	CAS No.	LTEL (8 hr TWA)		STEL (15 min)		Comments
		ppm	mg/m³	ppm	mg/m³	
Hydrocarbons, C10, aromatics, >1% naphthalene	-	-	5	-	-	-
Xylene, *o*-, *m*-, *p*- or mixed isomers	1330-20-7	50	220	100	441	Sk, BMGV
Ethylbenzene	100-41-4	100	441	125	552	Sk
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	-	-	1,200**	-	-	-
Trimethylbenzenes, all isomers or mixtures	25551-13-7	25	125	-	-	-

* Supplier's information for mineral oil, mist
** Supplier's information Reciprocal Calculation Procedure (RCP)

Sk: Can be absorbed through the skin.
BMGV: Biological Monitoring Guidance Value.

Biological monitoring guidance values (BMGVs)

Source: EH40/2005, 2nd Ed., 2011.

Substance	Biological monitoring guidance values	Sampling time
Xylene, *o-, m-, p-* or mixed isomers	650 mmol methyl hippuric acid/mol creatinine in urine	Post shift

Community exposure limits

Sources: ILV: 91/322/EEC; IOELV: 2000/39/EC, 2006/15/EC, 2009/161/EU

Substance	Exposure Limit Type	CAS No.	LTEL (8 hr TWA)		STEL (15 min)		Comments
			ppm	mg/m³	ppm	mg/m³	
Xylene, mixed isomers, pure	IOELV	1330-20-7	50	221	100	442	Skin
Ethylbenzene	IOELV	100-41-4	100	442	200	884	Skin
1,2,4-Trimethylbenzene	IOELV	95-63-6	20	100	-	-	-
Naphthalene	ILV	91-20-3	10	30	-	-	-

IOELV: Indicative Occupational Exposure Limit Value
ILV: Indicative Limit Value
Skin: Can be absorbed through the skin.

DNELs (Workers)

Substance	Route	Acute/short-term exposure		Long-term exposure	
		Systemic effects	Local effects	Systemic effects	Local effects
Hydrocarbons, C10, aromatics, >1% naphthalene	Inhalation	-	-	151 mg/m^3	-
	Dermal	-	-	12.5 mg/kg/day	-
Xylene	Inhalation	289 mg/m³	289 mg/m³	77 mg/m³	-
	Dermal	-	-	180 mg/kg bw/day	-
α,α'-Propylene-dinitrilodi-*o*-cresol	Inhalation	-	-	3.11 mg/m^3	-
	Dermal	-	-	0.88 mg/kg bw/day	-
Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tertbutylphenol	Inhalation	-	-	3.5 mg/m^3	-
	Dermal	-	-	0.5 mg/kg bw/day	-
Hydrocarbons, C10-13, aromatics, >1% naphthalene	Inhalation	-	-	151 mg/m^3	-
	Dermal	-	-	12.5 mg/kg/day	-
Ethylbenzene	Inhalation	-	293 mg/m^3	77 mg/m^3	-
	Dermal	-	-	180 mg/kg bw/day	-
2-Ethylhexan-1-ol	Inhalation	-	106.4 mg/m³	53.2 mg/m³	-
	Dermal	-	-	23 mg/kg bw/day	-
1,2,4-Trimethylbenzene	Inhalation	100 mg/m³	100 mg/m³	100 mg/m³	100 mg/m³
	Dermal	-	-	16171 mg/kg bw/day	-
Naphthalene	Inhalation	-	-	25 mg/m³	25 mg/m³
	Dermal	-	-	3.57 mg/kg bw/day	-

PNECs

Substance	Aqua (fresh water)	Aqua (marine water)	Aqua (intermittent releases)	Sewage Treatment Plants	Sediment (fresh water)	Sediment (marine water)	Soil	Oral
Xylene	0.327 mg/L	0.327 mg/L	0.327 mg/L	6.58 mg/L	12.46 mg/kg sediment dw	12.46 mg/kg sediment dw	2.31 mg/kg soil dw	-
α,α'-Propylene-dinitrilodi-*o*-cresol	0.001117 mg/L	0.0001117 mg/L	0.01117 mg/L	0.5 mg/L	59.4 mg/kg sediment dw	5.67 mg/kg sediment dw	11.8 mg/kg soil dw	-
Ethylbenzene	0.1 mg/L	0.01 mg/L	0.1 mg/L	9.6 mg/L	13.7 mg/kg sediment dw	1.37 mg/kg sediment dw	2.68 mg/kg soil dw	0.02 mg/kg food
2-Ethylhexan-1-ol	0.017 mg/L	0.0017 mg/L	0.17 mg/L	10 mg/L	0.28 mg/kg sediment dw	0.028 mg/kg sediment dw	0.047 mg/kg soil dw	55 mg/kg food
1,2,4-Trimethylbenzene	0.12 mg/L	0.12 mg/L	0.12 mg/L	2.41 mg/L	13.56 mg/kg sediment dw	13.56 mg/kg sediment dw	2.34 mg/kg soil dw	-
Naphthalene	0.0024 mg/L	0.0024 mg/L	0.0020 mg/L	2.9 mg/L	0.0672 mg/kg sediment dw	0.0672 mg/kg sediment dw	0.0533 mg/kg soil dw	-

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Provide adequate ventilation, including local extraction, to ensure that occupational exposure limits are not exceeded.

8.2.2 Personal protection

Eye protection: Goggles or safety glasses with side shields giving complete protection to eyes. (EN 166)

Skin protection:

Hand protection: Chemical resistant gloves (EN 374). Contact glove supplier to confirm suitable glove material, thickness and breakthrough times.

Other: Long sleeve protective clothing. Plastic apron. Rubber boots.

Respiratory protection: In the case of insufficient ventilation, wear respiratory equipment suitable for organic gases and vapours with a boiling point above 65°C. (EN 14387)

Thermal hazards: Wear suitable temperature resistant gloves and protective clothing if the product is heated.

8.2.3 Environmental exposure controls

Inform environmental manager of all incidents involving this product.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Green liquid.
Odour:	Aromatic.
Odour threshold:	Not available.
pH:	Not applicable.
Melting/freezing point:	Hydrocarbons, C10, aromatics, >1% naphthalene: < -10°C
Initial boiling point and boiling range:	Hydrocarbons, C10, aromatics, >1% naphthalene: 160 – 230°C (101 kPa)
Flash point:	Hydrocarbons, C10, aromatics, >1% naphthalene: > 62°C (Pensky–Martens closed cup)
Evaporation rate:	Not available.
Flammability (solid; gas):	Not applicable.
Upper/lower flammability or explosive limits:	Hydrocarbons, C10, aromatics, >1% naphthalene: 0.6% – 7.0% (v/v)
Vapour pressure:	Hydrocarbons, C10, aromatics, >1% naphthalene: 0.06 kPa (20°C)
Vapour density:	> 1 (Air = 1)
Relative density:	0.8 – 1 (Water = 1)
Solubility(ies):	Negligible in water. Miscible in aromatic solvents.
Partition coefficient: n-octanol/water:	Not available.
Auto-ignition temperature:	Hydrocarbons, C10, aromatics, >1% naphthalene: > 400°C
Decomposition temperature:	Not available.
Viscosity:	Hydrocarbons, C10, aromatics, >1% naphthalene: 0.8 - 2.0 cSt (20°C)
Explosive properties:	Not explosive. Vapour may form explosive mixture in air.
Oxidising properties:	Not oxidising.

9.2 Other information

None.

SECTION 10: Stability and Reactivity

10.1	**Reactivity**	Reacts with oxidising agents.
10.2	**Chemical stability**	Stable under normal conditions.
10.3	**Possibility of hazardous reactions**	No hazardous reactions expected during normal use.
10.4	**Conditions to avoid**	Keep away from sources of ignition, hot surfaces, direct sunlight. Contact with incompatible materials.
10.5	**Incompatible materials**	Oxidising agents.
10.6	**Hazardous decomposition products**	Combustion may liberate toxic fumes: Carbon monoxide, carbon dioxide, nitrogen oxides, various hydrocarbons.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

Not classified. May cause discomfort if swallowed.

No data available on the mixture. The following data are for the product components:

Hydrocarbons, C10, aromatics, >1% naphthalene:
LD_{50} (oral/rat): 6,318 mg/kg (OECD 401 read across)
LD_{50} (dermal/rabbit): > 2,000 mg/kg (OECD 402 read across)
LC_{50} (inhalation/rat): > 4,688 mg/m^3 (OECD 403 read across)

α,α'-Propylene-dinitrilodi-*o*-cresol:
LD_{50} (oral/rat): 1350 mg/kg

1,2,4-Trimethylbenzene:
LD_{50} (oral/rat): 6,000 mg/kg
LD_{50} (inhalation/rat): 10.2 mg/L, 4 h (read-across from Shellsol A, hydrocarbon solvent (essentially C9 isomers, particularly trimethylbenzenes))

Naphthalene:
LD_{50} (oral/rat): 533 mg/kg

Skin corrosion/irritation

Causes skin irritation. Repeated exposure may cause skin dryness or cracking.

Serious eye damage/irritation	Causes serious eye damage.
Skin sensitisation	May cause an allergic skin reaction. Contains α,α'-propylenedinitrilodi-*o*-cresol.
Respiratory sensitisation	Not classified. The product does not contain substances classified as respiratory sensitisers above the classification thresholds.
Germ cell mutagenicity	Not classified. The product does not contain substances classified as mutagenic above the classification thresholds.
Carcinogenicity	Suspected of causing cancer.
Reproductive toxicity	Not classified. The product does not contain substances classified as reproductive toxins above the classification thresholds.
Specific Target Organ Toxicity – single exposure	May cause drowsiness or dizziness.
Specific Target Organ Toxicity – repeated exposure	Not classified. The product does not contain substances classified for specific target organ toxicity after repeated exposure above the classification thresholds.
Aspiration hazard	May be fatal if swallowed and enters airways. Risk of aspiration into lungs resulting in chemical pneumonia.

Information on likely routes of exposure

Inhalation	May cause drowsiness or dizziness.
Skin contact	Causes skin irritation. Repeated exposure may cause skin dryness or cracking.
Eye contact	Causes serious eye damage.
Ingestion	May be fatal if swallowed and enters airways. Risk of aspiration into lungs resulting in chemical pneumonia. Ingestion may cause discomfort and irritation to the mouth and gastrointestinal tract.

Symptoms related to the physical, chemical and toxicological characteristics	Skin contact causes irritation, redness and pain. Repeated exposure may cause skin dryness or cracking. May cause an allergic skin reaction. Eye contact causes burns, watering, redness and pain. Inhalation of vapours may cause drowsiness or dizziness. If swallowed, aspiration into lungs may result in chemical pneumonia. Ingestion may cause discomfort and irritation to the mouth and gastrointestinal tract.

Mixture versus substance information No data available.

Other information None.

SECTION 12: Ecological Information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

No data available on the mixture. The following data are for the product components:

Hydrocarbons, C10, aromatics, >1% naphthalene:
LC_{50} (*Oncorhynchus mykiss*): 2-5 mg/L, 96 h
EL_{50} (*Daphnia magna*): 10 mg/L, 48 h
EL_{50} (*Pseudokirchnerella subcapitata*): 1-3 mg/L, 72 h (biomass)
EL_{50} (*Pseudokirchnerella subcapitata*): 1-3 mg/L, 72 h (growth rate)
NOELR (*Pseudokirchnerella subcapitata*): ca. 1 mg/L, 72 h (nominal, biomass)
NOELR (*Pseudokirchnerella subcapitata*): ca. 1 mg/L, 72 h (nominal, growth rate)

Naphthalene:
LC_{50} (*Pimephales promelas*): 6.08 mg/L, 96 h
LC_{50} (*Oncorhynchus mykiss*): 1.6 mg/L, 96 h
LC_{50} (Oncorhynchus kisutch): 2.1 mg/L, 96 h
EC_{50} (*Daphnia magna*): 2.16 mg/L, 48 h
NOEC (*Oncorhynchus kisutch*): 0.37 mg/L, 40 days
NOEC (*Daphnia pulex*): 0.59 mg/L, 125 days

12.2 Persistence and degradability

No data available on the mixture. The following data are for the product components:

Hydrocarbons, C10, aromatics, >1% naphthalene:
Inherently biodegradable.

12.3 Bioaccumulative potential No data available.

12.4 Mobility in soil No data available.

12.5 Results of PBT and vPvB assessment The product does not contain substances assessed to be PBT or vPvB.

12.6 Other adverse effects None known.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

To be disposed of as hazardous waste. Disposal should be in accordance with local, state or national legislation.

Contaminated adsorbent must be removed in sealed, plastic lined drums and disposed of via an authorised waste disposal contractor. Do not empty into drains; dispose of this material and its container in a safe way.

SECTION 14: Transport Information

ADR

14.1	**UN Number**	3082
14.2	**UN Proper shipping name**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains hydrocarbons, C10, aromatics, >1% naphthalene)
14.3	**Transport hazard class(es)**	9
14.4	**Packing group**	III
14.5	**Environmental hazards**	Yes
14.6	**Special precautions for the user**	Read SDS and supplier instructions on correct use of the product.

ADN

14.1	**UN Number**	3082
14.2	**UN Proper shipping name**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains hydrocarbons, C10, aromatics, >1% naphthalene)
14.3	**Transport hazard class(es)**	9
14.4	**Packing group**	III
14.5	**Environmental hazards**	Yes
14.6	**Special precautions for the user**	Read SDS and supplier instructions on correct use of the product.

RID

14.1	**UN Number**	3082
14.2	**UN Proper shipping name**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains hydrocarbons, C10, aromatics, >1% naphthalene)
14.3	**Transport hazard class(es)**	9
14.4	**Packing group**	III
14.5	**Environmental hazards**	Yes

14.6	**Special precautions for the user**	Read SDS and supplier instructions on correct use of the product.

IATA/ICAO

14.1	**UN Number**	3082
14.2	**UN Proper shipping name**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains hydrocarbons, C10, aromatics, >1% naphthalene)
14.3	**Transport hazard class(es)**	9
14.4	**Packing group**	III
14.5	**Environmental hazards**	Yes
14.6	**Special precautions for the user**	Read SDS and supplier instructions on correct use of the product.

IMDG

14.1	**UN Number**	3082
14.2	**UN Proper shipping name**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains hydrocarbons, C10, aromatics, >1% naphthalene)
14.3	**Transport hazard class(es)**	9
14.4	**Packing group**	III
14.5	**Environmental hazards**	Marine pollutant.
14.6	**Special precautions for the user**	Read SDS and supplier instructions on correct use of the product.
14.7	**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code**	The product is not intended to be transported in bulk.

SECTION 15: Regulatory Information

15.1	**Safety, health and environmental regulations/legislation specific for the substance or mixture**	This Safety Data Sheet was prepared in accordance with EC Regulation (EC) No. 1907/2006 as amended. The product has been classified in accordance with Regulation (EC) No. 1272/2008 (CLP), Directive 67/548/EEC & Directive 1999/45/EC.
15.2	**Chemical Safety Assessment**	Not applicable.

SECTION 16: Other Information

Full text of relevant R-phrases and/or H-statements:

Hazard Statement(s):	H225: Highly flammable liquid and vapour.

H226: Flammable liquid and vapour.
H302: Harmful if swallowed.
H304: May be fatal if swallowed and enters airways.
H312: Harmful in contact with skin.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.
H351: Suspected of causing cancer.
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.

Supplemental Hazard information (EU):

EUH066: Repeated exposure may cause skin dryness or cracking.

Risk phrase(s):

R10: Flammable.
R11: Highly flammable.
R20: Harmful by inhalation.
R20/21: Harmful by inhalation and in contact with skin.
R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.
R21/22: Harmful in contact with skin and if swallowed.
R22: Harmful if swallowed.
R34: Causes burns.
R36/37/38: Irritating to eyes, respiratory system and skin.
R36/38: Irritating to eyes and skin.
R38: Irritating to skin.
R40: Limited evidence of carcinogenic effect.
R41: Risk of serious damage to eyes.
R43: May cause sensitisation by skin contact.
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65: Harmful: may cause lung damage if swallowed.
R66: Repeated exposure may cause skin dryness or cracking.
R67: Vapours may cause drowsiness and dizziness.

Abbreviations:

CAS:	Chemical Abstracts Service;
EINECS:	European Inventory of Existing Commercial Chemical Substances
EC_{50}:	Effective Concentration 50%
EL_{50}:	Effective Loading rate 50%
LC_{50}:	Lethal Concentration 50%
LD_{50}:	Lethal Dose 50%
LL_{50}:	Lethal Loading rate 50%
LOEL:	Lowest Observed Effect Level
NOEL:	No Observed Effect Level
NOELR:	No Observable Effect Loading Rate
PBT:	Persistent, Bioaccumulative and Toxic.
vPvB:	Very Persistent and Very Bioaccumulative.
WAF:	Water Accommodated Fraction.

References:

Supplier's Safety Data Sheets for ingredients
ECHA REACH dossiers
Approved Classification and Labelling Guide (Sixth edition)
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009
Regulation (EC) No. 1272/2008 of the European Parliament and of the council.

Disclaimer:

THE INFORMATION PRESENTED HEREIN IS BELIEVED TO BE ACCURATE, BUT IS NOT WARRANTED TO BE, WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM, IN ADVANCE OF NEED, THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE TO THEIR CIRCUMSTANCES.

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