



FuelPower Conditioner Wilhelmsen Ships Service AS

Part Number: **778785** Version No: 6.20 Safety Data Sheet (Conforms to Annex II of REACH (1907/2006) - Regulation 2020/878) Issue Date: 12/04/2021 Print Date: 09/11/2023 L.REACH.NOR.EN

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

1.1. Product Identifier

Product name	FuelPower Conditioner
Chemical Name	Not Applicable
Synonyms	Fuel treatment
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent naphta, (petroleum), heavy aromatic mixture)
Chemical formula	Not Applicable
Other means of identification	778785

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

Procedural Category	PROC16 Use of fuels		
Chemical Product Category	PC13 Fuels		
Sectors of Use	SU3 Industrial uses: Uses of substances as such or in preparations* at industrial sites		
Relevant identified uses	Fuel Oil Treatment		
Uses advised against	No specific uses advised against are identified.		

1.3. Details of the manufacturer or supplier of the safety data sheet

Registered company name	Wilhelmsen Ships Service AS	Outback (M)SDS portal: http://jr.chemwatch.net/outb/account /autologin?login=wilhelmsen	Wilhelmsen Ships Service AS* Central Warehouse	
Address	Strandveien 20 Lysaker 1366 Norway	Use our Outback portal to obtain our (M)SDSs in other languages and/or format For questions relating to our SDSs please use Email: WSS.GLOBAL.SDSINFO@wilhelmsen.com Norway	Willem Barentszstraat 50 Rotterdam Netherlands	
Telephone	+47 67 58 40 00	Not Available	+31 10 4877 777	
Fax	Not Available	Not Available	Not Available	
Website http://www.wilhelmsen.com/		http://www.wilhelmsen.com	http://www.wilhelmsen.com	
Email	wss.norway.cs@wilhelmsen.com	wss.global.sdsinfo@wilhelmsen.com	wss.rotterdam@wilhelmsen.com	
Danistanad sammanı vanıs	Will almost China Camina ACt Can	deal Warehaus		

Registered company name	Tilhelmsen Ships Service AS* Central Warehouse		
Address	illem Barentszstraat 50 Rotterdam Netherlands		
Telephone +31 10 4877 777			

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Fax	Not Available
Website	http://www.wilhelmsen.com
Email	wss.rotterdam@wilhelmsen.com

1.4. Emergency telephone number

Association / Organisation	Giftinformasjonssentralen - 24 timer	24hrs - Chemwatch	Dutch nat. poison centre	
Emergency telephone numbers	+47 22591300	+31-10-4877700 + 31 88 7558561		
Other emergency telephone numbers	+31-10-4877700	+31-10-4877700	+ 31 10 4877700	

Association / Organisation	Dutch nat. poison centre	CHEMWATCH EMERGENCY RESPONSE (24/7)		
Emergency telephone numbers	+ 31 30 274 88 88	+47 23 25 25 84		
Other emergency telephone numbers	+ 31-10-4877700	+61 3 9573 3188		

Once connected and if the message is not in your preferred language then please dial 01

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

Considered a hazardous mixture according to Reg. (EC) No 1272/2008 and their amendments. Classified as Dangerous Goods for transport purposes.

Classification according to regulation (EC) No 1272/2008 [CLP] and amendments [1]

H336 - Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3, H411 - Hazardous to the Aquatic Environment Long-Term Hazard Category 2, H315 - Skin Corrosion/Irritation Category 2, H372 - Specific Target Organ Toxicity - Repeated Exposure Category 1, H304 - Aspiration Hazard Category 1, H351 - Carcinogenicity Category 2

Legend:

1. Classified by Chemwatch; 2. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

2.2. Label elements

Hazard pictogram(s)







Signal word

Danger

Hazard statement(s)

H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
H315	Causes skin irritation.
H372	Causes damage to organs through prolonged or repeated exposure. (Nervous system) (Inhalation)
H304	May be fatal if swallowed and enters airways.
H351	Suspected of causing cancer.

Supplementary statement(s)

Not Applicable

CLP classification (additional)

Not Applicable

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P260	Do not breathe mist/vapours/spray.

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Use only outdoors or in a well-ventilated area.

Precautionary statement(s) Response

P301+P310	P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider.	
P331	P331 Do NOT induce vomiting.	
P308+P313 IF exposed or concerned: Get medical advice/ attention.		

Precautionary statement(s) Storage

P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

2.3. Other hazards

Ingestion may produce health damage*.

REACH - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

SECTION 3 Composition / information on ingredients

3.1.Substances

See 'Composition on ingredients' in Section 3.2

3.2.Mixtures

1. CAS No 2.EC No 3.Index No 4.REACH No	%[weight]	Name	Classification according to regulation (EC) No 1272/2008 [CLP] and amendments	SCL / M-Factor	Nanoform Particle Characteristics
1. 91-20-3 2.202-049-5 3.601-052-00-2 4.Not Available	1-2	nanhthalene *		Not Available	Not Available
1. Not Available 2.919-164-8 3.Not Available 4.01-21194739 77-17-0004	60-70	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)-	Specific Target Organ Toxicity - Repeated Exposure Category 1, Aspiration Hazard Category 1, Hazardous to the Aquatic Environment Long-Term Hazard Category 3; H372, H304, H412, EUH066 [1]	0	Not Available
1. 64742-94-5* 2.265-198-5 3.649-424-00-3 4.Not Available	10-30	Hydrocarbons; C10, aromatics, >1% naphtalene	Aspiration Hazard Category 1, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3, Carcinogenicity Category 2, Hazardous to the Aquatic Environment Long-Term Hazard Category 2; H304, H336, H351, H411, EUH066 [1]	Not Available	Not Available
1. 9040-65-7* 2.Not Available 3.Not Available 4.Not Available	10-30	Formaldehyde, polymer with nonylphenol	Skin Corrosion/Irritation Category 2; H315 [1]	0	Not Available
I egend:	rend: 1 Classified by Chemwatch: 2 Classification drawn from Regulation (FLI) No 1272/2008 - Anney VI: 3 Classification drawn from				

Legend:

1. Classified by Chemwatch; 2. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 3. Classification drawn from C&L; * EU IOELVs available; [e] Substance identified as having endocrine disrupting properties

SECTION 4 First aid measures

4.1. Description of first aid measures

If this product comes in contact with the eyes:

Eye Contact

Wash out immediately with fresh running water.

• Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

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	 Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

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

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours. Treat symptomatically.

for naphthalene intoxication: Naphthalene requires hepatic and microsomal activation prior to the production of toxic effects. Liver microsomes catalyse the initial synthesis of the reactive 1,2-epoxide intermediate which is subsequently oxidised to naphthalene dihydrodiol and alpha-naphthol. The 2-naphthoquinones are thought to produce haemolysis, the 1,2-naphthoquinones are thought to be responsible for producing cataracts in rabbits, and the glutathione-adducts of naphthalene-1,2-oxide are probably responsible for pulmonary toxicity. Suggested treatment regime:

- Induce emesis and/or perform gastric lavage with large amounts of warm water where oral poisoning is suspected.
- Instill a saline cathartic such as magnesium or sodium sulfate in water (15 to 30g).
- Demulcents such as milk, egg white, gelatin, or other protein solutions may be useful after the stomach is emptied but oils should be avoided because they promote absorption.
- If eyes/skin contaminated, flush with warm water followed by the application of a bland ointment.
- Severe anaemia, due to haemolysis, may require small repeated blood transfusions, preferably with red cells from a non-sensitive individual.
- Where intravascular haemolysis, with haemoglobinuria occurs, protect the kidneys by promoting a brisk flow of dilute urine with, for example, an osmotic diuretic such as mannitol. It may be useful to alkalinise the urine with small amounts of sodium bicarbonate but many researchers doubt whether this prevents blockage of the renal tubules.
- Use supportive measures in the case of acute renal failure. GOSSELIN, SMITH HODGE: Clinical Toxicology of Commercial Products, 5th Ed.

SECTION 5 Firefighting measures

5.1. Extinguishing media

- Foam.
- ▶ Dry chemical powder.
- ▶ BCF (where regulations permit).

5.2. Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.
50.41: 6 % % 14	
5.3. Advice for firefighters	<u> </u>
	► Alert Fire Brigade and tell them location and nature of hazard.
Fire Fighting	 Wear full body protective clothing with breathing apparatus.

▶ Prevent, by any means available, spillage from entering drains or water course.

Fire/Explosion Hazard

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8

6.2. Environmental precautions

See section 12

6.3. Methods and material for containment and cleaning up

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Minor Spills	Environmental hazard - contain spillage. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.
Major Spills	Environmental hazard - contain spillage. Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard.

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

	-
Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area.
Fire and explosion protection	See section 5
Other information	 Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area.

7.2. Conditions for safe storage, including any incompatibilities

Suitable container	 Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	None known
Hazard categories in accordance with Regulation (EC) No 1272/2008	E2: Hazardous to the Aquatic Environment in Category Chronic 2
Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of	E2 Lower- / Upper-tier requirements: 200 / 500















- X Must not be stored together
- May be stored together with specific preventions
- + May be stored together

Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.

7.3. Specific end use(s)

See section 1.2

SECTION 8 Exposure controls / personal protection

8.1. Control parameters

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
naphthalene	Dermal 3.57 mg/kg bw/day (Systemic, Chronic) Inhalation 25 mg/m³ (Systemic, Chronic) Inhalation 25 mg/m³ (Local, Chronic)	2.4 μg/L (Water (Fresh)) 20 μg/L (Water - Intermittent release) 2.4 μg/L (Water (Marine)) 67.2 μg/kg sediment dw (Sediment (Fresh Water))

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Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
		67.2 μg/kg sediment dw (Sediment (Marine)) 53.3 μg/kg soil dw (Soil) 2.9 mg/L (STP)
Hydrocarbons; C10, aromatics, >1% naphtalene	Dermal 0.95 mg/kg bw/day (Systemic, Chronic) Inhalation 2.31 mg/m³ (Systemic, Chronic) Inhalation 2.31 mg/m³ (Local, Chronic) Inhalation 384 mg/m³ (Systemic, Acute) Inhalation 160.23 mg/m³ (Local, Acute) Dermal 0.28 mg/kg bw/day (Systemic, Chronic) * Inhalation 0.69 mg/m³ (Systemic, Chronic) * Oral 0.03 mg/kg bw/day (Systemic, Chronic) * Inhalation 0.69 mg/m³ (Local, Chronic) * Inhalation 226 mg/m³ (Systemic, Acute) * Oral 25.6 mg/kg bw/day (Systemic, Acute) * Inhalation 143.5 mg/m³ (Local, Acute) *	Not Available

^{*} Values for General Population

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
EU Consolidated List of Indicative Occupational Exposure Limit Values (IOELVs)	naphthalene	Naphthalene	10 ppm / 50 mg/m3	Not Available	Not Available	Not Available
Norway regulations on action rvalues and limit values physical and chemical factors in the work environment and infection risk groups for biological factors (Norwegian)	naphthalene	Naftalen	10 ppm / 50 mg/m3	Not Available	Not Available	E
Europe ECHA Occupational exposure limits substance evaluations	naphthalene	Not Available	Not Available	Not Available	Not Available	Not Available

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
naphthalene	15 ppm	83 ppm	500 ppm

Ingredient	Original IDLH	Revised IDLH
naphthalene	250 ppm	Not Available
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)-	Not Available	Not Available
Hydrocarbons; C10, aromatics, >1% naphtalene	Not Available	Not Available
Formaldehyde, polymer with nonylphenol	Not Available	Not Available

Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit	
Formaldehyde, polymer with nonylphenol	Е	≤ 0.1 ppm	
Notes:	Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.		

MATERIAL DATA

Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations. Present day expectations require that nearly every individual should be protected against even minor sensory irritation and exposure standards are established using uncertainty factors or safety factors of 5 to 10 or

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more.

for naphthalene:

Odour Threshold Value: 0.038 ppm

The TLV-TWA is thought to be low enough to prevent ocular toxicity but the margin of safety associated with the TLV for hypersusceptible individuals (with glucose-6-phosphate dehydrogenase defective erythrocytes) to naphthalene-induced blood dyscrasias is unknown. Individual sensitivity to inhaled naphthalene-induced haemotoxicity varies greatly with even small doses producing acute haemolysis in some.

Odour Safety Factor(OSF)
OSF=1.2E2 (NAPHTHALENE)

8.2. Exposure controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to 8.2.1. Appropriate provide this high level of protection. engineering controls The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. 8.2.2. Individual protection measures, such as personal protective equipment Safety glasses with side shields. Eye and face protection ► Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent] ▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Skin protection See Hand protection below The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Hands/feet protection The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. ▶ Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber **Body protection** See Other protection below Overalls. Other protection P.V.C apron. Barrier cream.

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

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Material	CPI
TEFLON	Α

^{*} CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

8.2.3. Environmental exposure controls

See section 12

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

The information on basic physical and one-mout proportion			
Appearance	Clear, light brown		
Physical state	Liquid	Relative density (Water =	0.84

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		1)	
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	>61	Taste	Not Available
Evaporation rate	Not Available BuAC = 1	Explosive properties	Not Available
Flammability	Combustible.	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available
Nanoform Solubility	Not Available	Nanoform Particle Characteristics	Not Available
Particle Size	Not Available		

9.2. Other information

Not Available

SECTION 10 Stability and reactivity

10.1.Reactivity	See section 7			
10.2. Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur. 			
10.3. Possibility of hazardous reactions	See section 7			
10.4. Conditions to avoid	See section 7			
10.5. Incompatible materials	See section 7			
10.6. Hazardous decomposition products	See section 5			

SECTION 11 Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo. Inhalation of naphthalene vapour has been associated with headache, loss of appetite and nausea. Other conditions associated with exposure to the vapour include optic neuritis, corneal injury and kidney damage. Animals exposed to aerosols of a refined commercial solvent mixture consisting primarily of mono-methylated naphthalenes, exhibited dyspnoea.
Ingestion	Swallowing of the liquid may cause aspiration of vomit into the lungs with the risk of haemorrhaging, pulmonary oedema, progressing to chemical pneumonitis; serious consequences may result. Signs and symptoms of chemical (aspiration) pneumonitis may include coughing, gasping, choking, burning of the mouth, difficult breathing, and bluish coloured skin (cyanosis). The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident.

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Ingestion of naphthalene and its congeners may produce abdominal cramps with nausea, vomiting, diarrhoea, headache, profuse perspiration, listlessness, confusion, and in severe poisonings, coma with or without convulsions. Irritation of the urinary bladder may also occur (presumably due to the excretory products of naphthalene metabolism) and produce urgency, dysuria, and the passage of brown or black urine with or without albumin or casts. These effects may disappear within a few days and have not been associated with haemolysis which is a prominent finding in naphthalene poisoning. The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. **Skin Contact** Workers sensitised to naphthalene and its congeners show exfoliative dermatitis. Hypersensitivity, with positive patch tests, has been demonstrated in certain individuals. Percutaneous absorption is apparently inadequate to produce acute systemic reactions, except in new-born babies. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. Limited evidence exists, or practical experience suggests, that the material may cause eye irritation in a substantial number of individuals and/or is expected to produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged eye contact may cause inflammation characterised by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye Eve damage/ulceration may occur. Exposure to naphthalene and its congeners has produced cataracts in animals and workers. In one study, eight of twenty-one workers, exposed to naphthalene for 5-years, showed opacities of the lens. On the basis, primarily, of animal experiments, concern has been expressed that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment. Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. Serious damage (clear functional disturbance or morphological change which may have toxicological significance) is likely to be

caused by repeated or prolonged exposure. As a rule the material produces, or contains a substance which produces severe lesions. Such damage may become apparent following direct application in subchronic (90 day) toxicity studies or following sub-acute (28 day) or chronic (two-year) toxicity tests. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.

In a two-year inhalation study, groups of mice were exposed at 0, 10 or 30 ppm naphthalene, 6 hours/day, 5 days/week for 103 weeks. Female mice showed an increase of pulmonary alveolar/bronchiolar adenomas at 30 ppm. There was no increase in the incidence of tumours in male mice.

FuelPower Conditioner	TOXICITY	IRRITATION	
rueirowei Conditionei	Not Available	Not Available	
	TOXICITY	IRRITATION	
a subdistant	dermal (rat) LD50: >2500 mg/kg ^[2]	Eye (rabbit): 100 mg - mild	
naphthalene	Inhalation(Rat) LC50: >0.4 mg/l4h ^[1]	Skin (rabbit):495 mg (open) - mild	
	Oral (Rat) LD50: 490 mg/kg ^[2]		
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)-	TOXICITY	IRRITATION	
	Dermal (Other) LD50: >3400 mg/kg ^[2]	Not Available	
	Inhalation(Rat) LC50: 13,1 mg/kg ^[2]		
	Oral (Rat) LD50: >15000 mg/kg ^[2]		
	TOXICITY	IRRITATION	
Hydrocarbons; C10,	Dermal (rabbit) LD50: >3160 mg/kg ^[2]	Eye (rabbit): Irritating	
aromatics, >1% naphtalene	Oral (Rat) LD50: 3200 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1]	
		Skin: adverse effect observed (irritating) ^[1]	
Formaldehyde, polymer	TOXICITY	IRRITATION	
with nonylphenol	Not Available	Not Available	
Legend:	Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances		

NAPHTHALENE

Chronic

The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to

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irritants may produce conjunctivitis.

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.

WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.

Hydrocarbons; C10, aromatics, >1% naphtalene

For petroleum: This product contains benzene, which can cause acute myeloid leukaemia, and n-hexane, which can be metabolized to compounds which are toxic to the nervous system. This product contains toluene, and animal studies suggest high concentrations of toluene lead to hearing loss. This product contains ethyl benzene and naphthalene, from which animal testing shows evidence of tumour formation.

Cancer-causing potential: Animal testing shows inhaling petroleum causes tumours of the liver and kidney; these are however not considered to be relevant in humans.

Mutation-causing potential: Most studies involving gasoline have returned negative results regarding the potential to cause mutations, including all recent studies in living human subjects (such as in petrol service station attendants).

Reproductive toxicity: Animal studies show that high concentrations of toluene (>0.1%) can cause developmental effects such as lower birth weight and developmental toxicity to the nervous system of the foetus.

Acute Toxicity	×	Carcinogenicity	✓
Skin Irritation/Corrosion	~	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	•
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	✓
Mutagenicity	×	Aspiration Hazard	✓

Legend: X − Data either not available or does not fill the criteria for classification

✓ – Data available to make classification

11.2 Information on other hazards

11.2.1. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

11.2.2. Other information

See Section 11.1

SECTION 12 Ecological information

12.1. Toxicity

	Endpoint	Test Duration (hr)	Species	Value	Source
FuelPower Conditioner	Not Available	Not Available	Not Available Not Available		Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
	BCF	1344h	Fish	23-146	7
n ambib alan a	EC50	72h	Algae or other aquatic plants	ca.0.4mg/l	1
naphthalene	EC50	48h	Crustacea	1.09-3.4mg/l	4
	EC50(ECx)	0.05h	Crustacea	<0.00001mg/l	4
	LC50	96h	Fish	0.213mg/l	4
	Endpoint	Test Duration (hr)	Species	Value	Source
Hydrocarbons, C10-C13, n-alkanes, isoalkanes,	EC50	48	Crustacea Daphnia magna	100mg/L	8
cyclics, aromatics (2-25%)-	LC50	96	Fish Oncorhynchus mykiss (Rainbow trout)	10-100mg/L	8
	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	<1mg/l	1
Hydrocarbons; C10,	EC50	48h	Crustacea	0.95mg/l	1
romatics, >1% naphtalene	EC50	96h	Algae or other aquatic plants	11.7mg/l	2
	LC50	96h	Fish	2-5mg/l	Not Available

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	EC50(ECx)	48h	Crustacea	0.95mg/l	1
Farmed bloods and are	Endpoint	Test Duration (hr)	Species	Value	Source
Formaldehyde, polymer with nonylphenol	Not Available	Not Available	Not Available	Not Available	Not Available
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

for naphthalene:

Environmental fate:

Naphthalene released to the atmosphere may be transported to surface water and/or soil by wet or dry deposition. Since most airborne naphthalene is in the vapor phase, deposition is expected to be very slow (about 0.04–0.06 cm/sec). It has been estimated that about 2–3% of naphthalene emitted to air is transported to other environmental media, mostly by dry deposition .

DO NOT discharge into sewer or waterways.

12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
naphthalene	HIGH (Half-life = 258 days)	LOW (Half-life = 1.23 days)

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
naphthalene	HIGH (BCF = 18000)
Hydrocarbons; C10, aromatics, >1% naphtalene	LOW (BCF = 159)

12.4. Mobility in soil

Ingredient	Mobility
naphthalene	LOW (KOC = 1837)

12.5. Results of PBT and vPvB assessment

	Р	В	Т	
Relevant available data	Not Available	Not Available	Not Available	
PBT	×	×	×	
vPvB	×	X	x	
PBT Criteria fulfilled?	PBT Criteria fulfilled?			
vPvB	No			

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

12.7. Other adverse effects

No evidence of ozone depleting properties were found in the current literature.

SECTION 13 Disposal considerations

13.1. Waste treatment methods

- Containers may still present a chemical hazard/ danger when empty.

Product / Packaging disposal

Return to supplier for reuse/ recycling if possible.

If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.

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	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.
	DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal.
	In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
	▶ Recycle wherever possible or consult manufacturer for recycling options.
	► Consult State Land Waste Management Authority for disposal.
	Bury residue in an authorised landfill.
Waste treatment options	Not Available
Sewage disposal ontions	Not Available

SECTION 14 Transport information

Labels Required



Marine Pollutant



Land transport (ADR-RID)

14.1. UN number or ID number	3082			
14.2. UN proper shipping name	ENVIRONMENTALLY H	IAZARDO	US SUBSTANCE, LIC	UID, N.O.S. (Solvent naphta, (petroleum), heavy aromatic mixture)
14.3. Transport hazard	Class	9		
class(es)	Subsidiary Hazard	Not Applic	cable	
14.4. Packing group	III			
14.5. Environmental hazard	Environmentally hazard	ous		
	Hazard identification (Kemler)	90	
	Classification code		M6	
14.6. Special precautions	Hazard Label		9	
for user	Special provisions		274 335 375 601	
	Limited quantity		5 L	
	Tunnel Restriction Cod	de	Not Applicable	

Air transport (ICAO-IATA / DGR)

14.1. UN number	3082			
14.2. UN proper shipping name	Environmentally hazardous substa	nce, liquid, n.o.s. (Solvent	naphta, (petroleum), heavy aromatic mixture)	
	ICAO/IATA Class	9		
14.3. Transport hazard class(es)	ICAO / IATA Subsidiary Hazard	Not Applicable		
Ciuss(CS)	ERG Code	9L		
14.4. Packing group	III			
14.5. Environmental hazard	Environmentally hazardous			
	Special provisions		A97 A158 A197 A215	
14.6. Special precautions	Cargo Only Packing Instructions		964	
for user	Cargo Only Maximum Qty / Pack		450 L	

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Passenger and Cargo Packing Instructions	964
Passenger and Cargo Maximum Qty / Pack	450 L
Passenger and Cargo Limited Quantity Packing Instructions	Y964
Passenger and Cargo Limited Maximum Qty / Pack	30 kg G

Sea transport (IMDG-Code / GGVSee)

14.1. UN number	3082	
14.2. UN proper shipping name	ENVIRONMENTALLY	/ HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent naphta, (petroleum), heavy aromatic mixture)
14.3. Transport hazard class(es)	IMDG Class IMDG Subsidiary Ha	9 azard Not Applicable
14.4. Packing group	III	1 **
14.5 Environmental hazard	Marine Pollutant EMS Number	F-A, S-F
14.6. Special precautions for user	Special provisions	274 335 969
	Limited Quantities	5 L

Inland waterways transport (ADN)

14.1. UN number	3082	
14.2. UN proper shipping name	ENVIRONMENTALLY H	HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent naphta, (petroleum), heavy aromatic mixture)
14.3. Transport hazard class(es)	9 Not Applicable	
14.4. Packing group	III	
14.5. Environmental hazard	Environmentally hazard	lous
	Classification code	M6
	Special provisions	274; 335; 375; 601
14.6. Special precautions for user	Limited quantity	5 L
	Equipment required	PP
	Fire cones number	0

14.7. Maritime transport in bulk according to IMO instruments

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
naphthalene	Not Available
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)-	Not Available
Hydrocarbons; C10, aromatics, >1% naphtalene	Not Available
Formaldehyde, polymer with nonylphenol	Not Available

14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
naphthalene	Not Available

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Product name	Ship Type
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)-	Not Available
Hydrocarbons; C10, aromatics, >1% naphtalene	Not Available
Formaldehyde, polymer with nonylphenol	Not Available

SECTION 15 Regulatory information

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

naphthalene is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

EU Consolidated List of Indicative Occupational Exposure Limit Values (IOELVs)

EU European Chemicals Agency (ECHA) Community Rolling Action Plan (CoRAP) List of Substances

Europe EC Inventory

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

Norway List of Priority Substances

sNorway regulations on action values and limit values for physical and chemical factors in the work environment and infection risk groups for biological fact (Norwegian)

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)- is found on the following regulatory lists

Not Applicable

Hydrocarbons; C10, aromatics, >1% naphtalene is found on the following regulatory lists

Europe EC Inventory

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic

$\label{lem:constraints} \textbf{Formaldehyde, polymer with nonylphenol is found on the following regulatory lists}$

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable -: Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2020/878; Regulation (EC) No 1272/2008 as updated through ATPs.

Information according to 2012/18/EU (Seveso III):

Seveso Category	E2
oc reso category	

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (naphthalene; Hydrocarbons; C10, aromatics, >1% naphtalene; Formaldehyde, polymer with nonylphenol)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	No (Formaldehyde, polymer with nonylphenol)
Japan - ENCS	No (Formaldehyde, polymer with nonylphenol)
Korea - KECI	Yes
New Zealand - NZIoC	No (naphthalene)

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National Inventory	Status
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (Formaldehyde, polymer with nonylphenol)
Vietnam - NCI	Yes
Russia - FBEPH	No (Formaldehyde, polymer with nonylphenol)
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

SECTION 16 Other information

Revision Date	12/04/2021
Initial Date	09/12/2016

CONTACT POINT

- For quotations contact your local Customer Services - http://wssdirectory.wilhelmsen.com/#/customerservices - - Responsible for safety data sheet Wilhelmsen Ships Service AS - Prepared by: Compliance Manager, - Email: Email: wss.global.sdsinfo@wilhelmsen.com - Telephone: Tel.: +47 67584000

Full text Risk and Hazard codes

H302	Harmful if swallowed.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	

SDS Version Summary

Version	Date of Update	Sections Updated
5.20	12/04/2021	Hazards identification - Classification, Composition / information on ingredients - Ingredients

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

EN 166 Personal eye-protection

EN 340 Protective clothing

EN 374 Protective gloves against chemicals and micro-organisms

EN 13832 Footwear protecting against chemicals

EN 133 Respiratory protective devices

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