SAFETY DATA SHEET

Industrial Heating Oil

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name: Industrial Heating Oil

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

Relevant identified uses of the substance or mixture: Fuel
Restricted to professional users.

Uses advised against : None known.

1.3. Details of the supplier of the safety data sheet

Company and address:

Crown Oil Ltd
The Oil Centre
Bury New Rd
Bury BL9 7HY
United Kingdom
03301231444
www.crownoil.co.uk

Contact person: Crown Oil Ltd

E-mail: technical@crownoil.co.uk

Revision: 05/12/2024

SDS Version: 1.0

1.4. Emergency telephone number

Healthcare professionals: Dial 0344 892 0111 to reach The National Poisons Information Service (NPIS) (24 hour service)
General public:
England - Dial 111 to reach NHS 111 (24 hour service)
Scotland - Dial 112 to reach NHS 24 (24 hour service)
Wales - Dial 111 or 0845 4647 to reach NHS Direct (24 hour service)
See section 4 “First aid measures”.

SECTION 2: HAZARDS IDENTIFICATION

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.1. Classification of the substance or mixture

Flam. Liq. 3; H226, Flammable liquid and vapour.
Asp. Tox. 1; H304, May be fatal if swallowed and enters airways.
Skin Irrit. 2; H315, Causes skin irritation.
Eye Irrit. 2; H319, Causes serious eye irritation.
Acute Tox. 4; H332, Harmful if inhaled.
STOT SE 3; H336, May cause drowsiness or dizziness.

Carc. 2; H351, Suspected of causing cancer.
STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.
Aquatic Acute 1; H400, Very toxic to aquatic life.
Aquatic Chronic 1; H410, Very toxic to aquatic life with long lasting effects.
Aquatic Chronic 2; H411, Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s):

Signal word: Danger

Hazard statement(s):
Flammable liquid and vapour. (H226)
May be fatal if swallowed and enters airways. (H304)
Causes skin irritation. (H315)
Causes serious eye irritation. (H319)
Harmful if inhaled. (H332)
May cause drowsiness or dizziness. (H336)
Suspected of causing cancer. (H351)
May cause damage to organs through prolonged or repeated exposure. (H373)
Very toxic to aquatic life with long lasting effects. (H410)

Precautionary statement(s):

General: -

Prevention:
Obtain special instructions before use. (P201)
Do not breathe vapour/mist. (P260)

Response:
IF SWALLOWED: Immediately call a POISON CENTER/doctor. (P301+P310)
Get medical advice/attention if you feel unwell. (P314)

Storage: Store in a well-ventilated place. Keep cool. (P403+P235)

Disposal:
Dispose of contents/container in accordance with local regulation
(P501)

Hazardous substances:
Kerosine (petroleum);Straight run kerosine;[A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (320 °F to 554 °F).]
Distillates (petroleum), Light Catalytic Cracked
Fuels, diesel;Gasoil - unspecified;[A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C20 and boiling in the range of approximately 163 °C to 357 °C (325 °F to 675 °F).]
Dodecene, hydroformylation products, low-boiling

Additional labelling:

2.3. Other hazards

Additional warnings: This product contains a vPvB and/or PBT substance:

Distillates (petroleum), Light Catalytic Cracked (PBT)
This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Kerosine (petroleum);Straight run kerosine;[A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (320 °F to 554 °F).]	CAS No.: 8008-20-6 EC No.: 232-366-4 UK-REACH: Index No.: 649-404-00-4	40-60%	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411	
Distillates (petroleum), Light Catalytic Cracked	CAS No.: 64741-59-9 EC No.: 265-060-4 UK-REACH: Index No.:	25-40%	Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332 Carc. 1B, H350 STOT RE 2, H373 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	
Fuels, diesel;Gasoil - unspecified;[A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C20	CAS No.: 68334-30-5 EC No.: 269-822-7 UK-REACH: Index No.: 649-224-00-6	15-25%	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Acute Tox. 4, H332 Carc. 1B, H350 STOT RE 2, H373 Aquatic Chronic 2, H411	[14]

and boiling in the range of approximately 163 °C to 357 °C (325 °F to 675 °F).]				
Dodecene, hydroformylation products, low-boiling	CAS No.: 68526-92-1 EC No.: 271-240-3 UK-REACH: Index No.:	10-15%	EUH066 Asp. Tox. 1, H304 Aquatic Chronic 4, H413	[19]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[14] The classification as a carcinogen will not be taken into account as the full refining history is known and it can be shown that the substance from which it is produced is not a carcinogen (CLP, Annex VI, note N).
[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information: In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation: Upon breathing difficulties or irritation of the respiratory tract: Bring the injured person into fresh air. Make sure the injured person is continuously monitored. Prevent shock by keeping the injured person warm and calm. If breathing ceases, give mouth-to-mouth resuscitation. If unconscious, roll the injured person into recovery position. Call an ambulance.

Skin contact: Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.

Eye contact: If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion: IF SWALLOWED: Immediately call a POISON CENTER/doctor.

	Do not induce vomiting! If vomiting occurs, keep head facing down so that vomit does not get into the lungs. Call a doctor or ambulance. Symptoms of chemical pneumonia can appear after several hours. People who have swallowed the product should therefore be kept under medical attention for at least 48 hours.
Burns:	Rinse with water until pain stops then continue to rinse for 30 minutes.

4.2. Most important symptoms and effects, both acute and delayed
This product contains substances that can cause chemical pneumonia if swallowed. Symptoms of chemical pneumonia may appear after several hours.

4.3. Indication of any immediate medical attention and special treatment needed
IF exposed or concerned:
Get immediate medical advice/attention.

Information to medics
Bring this safety data sheet or the label from this product.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media
Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.
Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture
Flammable liquid and vapour.
In use may form flammable/explosive vapour-air mixture.
Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

5.3. Advice for firefighters
Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.
Hazchem Code: 3Y

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.
Avoid direct contact with spilled substances.
Ensure adequate ventilation, especially in confined areas.
Avoid inhalation of vapours from spilled material.
Contaminated areas may be slippery.

6.2. Environmental precautions
Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up
Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth,

vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 “Disposal considerations” on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Ground and bond container and receiving equipment.
Use explosion-proof [electrical/lighting/ventilating] equipment.
Use non-sparking tools.
Take action to prevent static discharges.
It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.
Avoid direct contact with the product.
Avoid contact during pregnancy and while nursing.
Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Take action to prevent static discharges.
Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Recommended storage material:	Mild or stainless steel and oil resistant storage tanks
Storage conditions:	Dry, cool and well ventilated Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
Incompatible materials:	Strong oxidizing agents Strong acids Strong bases

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Distillates (petroleum), Light Catalytic Cracked
Long term exposure limit (8 hours) (mg/m^3): 27.3
Short term exposure limit (15 minutes) (mg/m^3): 2230

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.
EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

No data available.

PNEC

No data available.

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations:	Smoking, drinking and consumption of food is not allowed in the work area.
Exposure scenarios:	There are no exposure scenarios implemented for this product.
Exposure limits:	Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.
Appropriate technical measures:	Do not recirculate outlet air that contain the substances. The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked. Apply standard precautions during use of the product. Avoid inhalation of vapours.
Hygiene measures:	Take off contaminated clothing and wash it before reuse.
Measures to avoid environmental exposure:	Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally: Use only UKCA marked protective equipment.

Respiratory Equipment:

Type	Class	Colour	Standards	
Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.				

Skin protection:

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product.	-	-	

Hand protection:

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Protection Gloves				

Eye protection:

Type	Standards	
Safety glasses	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Dark amber / brown
Odour / Odour threshold:	Characteristic
pH:	No relevant or available data due to the nature of the product.
Density (g/cm^3):	0.83 (15 °C)
Kinematic viscosity:	1.5 - 5.0 centistokes (40 °C)
Particle characteristics:	Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C):	<-15
Softening point/range (°C):	Does not apply to liquids.
Boiling point (°C):	190
Vapour pressure:	No relevant or available data due to the nature of the product.
Relative vapour density:	No relevant or available data due to the nature of the product.
Decomposition temperature (°C):	No relevant or available data due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C):	45 Test method: EN ISO 2719
Flammability (°C):	The material is ignitable.
Auto-ignition temperature (°C):	No relevant or available data due to the nature of the product.
Lower and upper explosion limit (% v/v):	No relevant or available data due to the nature of the product.

Solubility

Solubility in water:	Insoluble
n-octanol/water coefficient (LogKow):	No relevant or available data due to the nature of the product.

Solubility in fat (g/L):	No relevant or available data due to the nature of the product.

9.2. Other information

Oxidizing properties:	No relevant or available data due to the nature of the product.
Other physical and chemical parameters:	No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
No data available.

10.2. Chemical stability
The product is stable under the conditions, noted in section 7 “Handling and storage”.

10.3. Possibility of hazardous reactions
None known.

10.4. Conditions to avoid
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

10.5. Incompatible materials
Original packaging

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

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law

Acute toxicity

Product/substance	Industrial Heating Oil
Other information:	Hazardous: calculated

Product/substance	Distillates (petroleum), Light Catalytic Cracked
Test method:	OECD 451
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	>2000 mg/kg

Product/substance	Distillates (petroleum), Light Catalytic Cracked
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50 (4 hours)
Result:	4650 mg/m^3

Product/substance	Distillates (petroleum), Light Catalytic Cracked
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50 (4 hours)

Result:	5.26 mg/L

Product/substance	Fuels, diesel;Gasoil - unspecified;[A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C20 and boiling in the range of approximately 163 °C to 357 °C (325 °F to 675 °F).]
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	>2000 mg/kg

Harmful if inhaled.

Skin corrosion/irritation

Product/substance	Industrial Heating Oil
Other information:	Hazardous: calculated

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Product/substance	Industrial Heating Oil
Conclusion:	Adverse effect observed

Suspected of causing cancer.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Product/substance	Industrial Heating Oil
Conclusion:	Adverse effect observed

May cause drowsiness or dizziness.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Product/substance	Industrial Heating Oil
Other information:	Hazardous: calculated

May be fatal if swallowed and enters airways.

11.2. Information on other hazards

Long term effects

Carcinogenic effects: This product contains substances considered or proven to be carcinogenic. The carcinogenic effects may be triggered subsequent to exposure through inhalation, skin contact or ingestion.
Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Product/substance	Industrial Heating Oil
Species:	Fish
Duration:	96 hours
Test:	LL50
Result:	0.156 mg/L

Product/substance	Industrial Heating Oil
Species:	Fish
Duration:	14 days
Test:	NOEC
Result:	0.029 mg/L

Product/substance	Industrial Heating Oil
Species:	Aquatic invertebrates
Duration:	21 days
Test:	NOEC
Result:	0.053 mg/L

Product/substance	Distillates (petroleum), Light Catalytic Cracked
Species:	Fish
Duration:	96 hours
Test:	LL50
Result:	0.156 mg/L

Product/substance	Distillates (petroleum), Light Catalytic Cracked
Species:	Fish
Duration:	14 days
Test:	NOEC
Result:	0.029 mg/L

Product/substance	Distillates (petroleum), Light Catalytic Cracked
Species:	Aquatic invertebrates
Duration:	21 days
Test:	NOEC
Result:	0.053 mg/L

Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Product/substance	Industrial Heating Oil
Compartment:	Not readily biodegradable
Conclusion:	-

Product/substance	Distillates (petroleum), Light Catalytic Cracked
Conclusion:	Potential for bioaccumulation

12.3. Bioaccumulative potential

Product/substance Industrial Heating Oil
Conclusion: -
Other information: The Product has a potential to bioaccumulate

12.4. Mobility in soil

Distillates (petroleum), Light Catalytic Cracked
LogKoc = 3, Moderate mobility potential.

12.5. Results of PBT and vPvB assessment

This product contains a vPvB and/or PBT substance:
Distillates (petroleum), Light Catalytic Cracked (PBT)

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.
This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product is covered by the regulations on hazardous waste. (*)
HP 3 - Flammable
HP 4 - Irritant (skin irritation and eye damage)
HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP 6 - Acute toxicity
HP 7 – Carcinogenic
HP 14 – Ecotoxic
Dispose of contents/container to an approved waste disposal plant.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

13 07 03* Other fuels (including mixtures)

Specific labelling

Contaminated packing

EWC code: 13 07 03* Other fuels (including mixtures)

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	UN1223	KEROSENE	Transport hazard class: 3 Label: 3 Classification code: F1	III	Yes	Limited quantities: 5 L

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
						Tunnel restriction code: (D/E) See below for additional information.
IMDG	UN1223	KEROSENE	Transport hazard class: 3 Label: 3 Classification code: F1 	III	Yes	Limited quantities: 5 L EmS: F-E S-E See below for additional information.
IATA	UN1223	KEROSENE	Transport hazard class: 3 Label: 3 Classification code: F1 	III	Yes	See below for additional information.

* Packing group

** Environmental hazards

Additional information

This product is within scope of the regulations of transport of dangerous goods.
ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.
IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.
IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.
Hazchem Code: 3Y

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: REGULATORY INFORMATION

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

Restrictions for application:	Restricted to professional users. People under the age of 18 shall not be exposed to this product. Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.
Demands for specific education:	No specific requirements.
Control of Major Accident Hazards (COMAH) - Categories / dangerous substances:	P5c - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 5.000 tonnes / (upper-tier): 50.000 tonnes E1 - ENVIRONMENTAL HAZARDS, Qualifying quantity (lower-tier): 100 tonnes / (upper-tier): 200 tonnes
UK-REACH, Annex XVII:	Kerosine (petroleum);Straight run kerosine;[A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (320 °F to 554 °F).] is subject to UK-REACH restrictions (entry 40). Fuels, diesel;Gasoil - unspecified;[A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C20 and boiling in the range of approximately 163 °C to 357 °C (325 °F to 675 °F).] is subject to UK-REACH restrictions (entry 40).
Additional information:	Not applicable.
Sources:	The Management of Health and Safety at Work Regulations 1999. The Health and Safety at Work etc. Act 1974 Regulations 2013. Control of Major Accident Hazards (COMAH) Regulations 2015. Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law. Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

EUH066, Repeated exposure may cause skin dryness or cracking.
H226, Flammable liquid and vapour.
H304, May be fatal if swallowed and enters airways.
H315, Causes skin irritation.
H319, Causes serious eye irritation.
H332, Harmful if inhaled.
H336, May cause drowsiness or dizziness.
H350, May cause 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.
H413, May cause long lasting harmful effects to aquatic life.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit

SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.
The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.
The classification of the mixture in regard to physical hazards has been based on experimental data.

The safety data sheet is validated by

Richard Hutchinson

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
It is recommended to hand over this safety data sheet to the actual user of the product.
Information in this safety data sheet cannot be used as a product specification.
Country-language: GB-en