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

1.1. Product identifier

Trade name/designation : Petroleum, Crude oil
 EC Index : 649-049-00-5
 EC No : 232-298-5
 CAS No. : 8002-05-9
 Formula : Unspecified

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

Main use category : Industrial use, Professional use, Consumer use

1.3. Details of the supplier of the safety data sheet

Company : Mercuria Energy Trading B.V. supplying for and on behalf of Mercuria Energy Trading S.A
 Herculesplein 108
 3584AA Utrecht , Netherlands
 Telephone +41 22 594 7000
 Telefax: +41 22 594 3904
 E-mail: emergency@sgs.com

1.4. Emergency telephone number

Emergency telephone : +32 3 575 11 30 (SGS 24/7 Emergency Hotline)

IRELAND (REPUBLIC OF)

National Poisons Information Centre

Beaumont Hospital

+353 18 37 99 64/+353 1 809 21 66

UNITED KINGDOM

National Poisons Information Service

(Newcastle Centre)

0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)

Regional Drugs and Therapeutics Centre,

Wolfson Unit

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EU) 1272/2008

CLP-Classification : The product is classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

Flam. Liq. 1 H224

Eye Irrit. 2 H319

Carc. 1B H350

STOT SE 3 H336

STOT RE 2 H373

Asp. Tox. 1 H304

Aquatic Chronic 2 H411


Full text of H-phrases: see section 16

2.1.2. Classification according to EU Directives 67/548/EEC or 1999/45/EC

Classification : This substance is classified as hazardous according to 67/548/EEC.

Carc.Cat.2; R45

F+; R12

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Xn; R65
R66
R67
Xn; R48/21/22
N; R51/53

Full text of R-phrases: see section 16

2.2. Label elements

2.2.1. Labelling according to Regulation (EU) 1272/2008

Hazard pictograms :



Signal word : Danger

Hazard statements : H224 - Extremely flammable liquid and vapour.
H304 - May be fatal if swallowed and enters airways.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.
H350 - May cause cancer.
H373 - May cause damage to organs through prolonged or repeated exposure.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements : P201 - Obtain special instructions before use.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor/.
P331 - Do NOT induce vomiting.

Extra phrases : EUH066 - Repeated exposure may cause skin dryness or cracking.

2.2.2. Labelling according to Directives (67/548 - 1999/45)

Not relevant


2.3. Other hazards

Other hazards : Vapours can form explosive mixtures with air.
Results of PBT and vPvB assessment :
Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance name	Product identifier	%	Classification according to Directive 67/548/EEC
Petroleum, Crude oil	(CAS No.) 8002-05-9 (EC No) 232-298-5 (EC Index) 649-049-00-5	100	Carc.Cat.2; R45 F+; R12 Xn; R65 R66 R67 Xn; R48/21/22 N; R51/53

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Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Petroleum, Crude oil	(CAS No.) 8002-05-9 (EC No) 232-298-5 (EC Index) 649-049-00-5	100	Flam. Liq. 1, H224 Eye Irrit. 2, H319 Carc. 1B, H350 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Full text of R- and H-phrases: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	: Remove person to fresh air and keep comfortable for breathing. When in doubt or if symptoms are observed, get medical advice.
Skin contact	: Take off contaminated clothing. Gently wash with plenty of soap and water. When in doubt or if symptoms are observed, get medical advice.
Eye contact	: Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. When in doubt or if symptoms are observed, get medical advice.
In case of ingestion	: Rinse mouth thoroughly with water. Do NOT induce vomiting. Get immediate medical advice/attention.
Additional advice	: First aider: Pay attention to self-protection! Personal protection equipment: see section 8 Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice. Show this safety data sheet to the doctor in attendance. Treat symptomatically.

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

Inhalation	: May cause drowsiness or dizziness.
Skin contact	: No adverse effects are expected.
Eye contact	: Causes serious eye irritation.
Ingestion	: May be fatal if swallowed and enters airways. The following symptoms may occur: Vomiting.
Other adverse effects	: May cause damage to organs through prolonged or repeated exposure. May cause cancer.


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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray, alcohol resistant foam, Dry extinguishing powder, Carbon dioxide
Extinguishing media which must not be used for safety reasons	: Strong water jet

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5.2. Special hazards arising from the substance or mixture

- Fire hazard : Extremely flammable liquid and vapour.
- Specific hazards : Heating causes rise in pressure with risk of bursting.
Vapours can form explosive mixtures with air.
Vapours are heavier than air, spread along floors and form explosive mixtures with air.
Vapours can travel considerable distances to a source of ignition where they can ignite, flash back, or explode.
Hazardous combustion products:
Carbon oxides

5.3. Advice for firefighters

- Advice for firefighters : Special protective equipment for firefighters.
In case of fire: Wear self-contained breathing apparatus.
Use water spray jet to protect personnel and to cool endangered containers.
Do not allow run-off from fire-fighting to enter drains or water courses.
Dispose according to legislation.
Evacuate area.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel : Evacuate area.
Stay upwind/keep distance from source.
Provide adequate ventilation.
Use personal protective equipment as required.
Personal protection equipment: see section 8
Do not breathe vapour/spray.
Avoid contact with skin, eyes and clothes.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ensure that the equipment is adequately grounded.
Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.
Use only non-sparking tools.
- For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place.
Personal protection equipment: see section 8.

6.2. Environmental precautions


- Environmental precautions : Do not allow to enter into ground-water, surface water or drains.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Use foam on spills to minimise vapours.
Stop leak if safe to do so.
Dam up.
Clean-up methods - small spillage: Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents)., Collect in closed and suitable containers for disposal.
Clean-up methods - large spillage: Large spills should be collected mechanically (remove by pumping) for disposal., Collect in closed and suitable containers for disposal.
Dispose of waste product or used containers according to local regulations.

6.4. Reference to other sections

- Personal protection equipment: see section 8
Disposal: see section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	: Provide adequate ventilation. Use personal protective equipment as required. Personal protection equipment: see section 8 Do not breathe vapour/spray. Avoid contact with skin, eyes and clothes. Take any precaution to avoid mixing with incompatible materials. See also section 10 Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Do not allow contact with soil, surface or ground water. Obtain special instructions before use. (Do not handle until all safety precautions have been read and understood.) Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure that the equipment is adequately grounded. Use explosion-proof machinery, apparatus, ventilation facilities, tools etc. Use only non-sparking tools.
Advices on general occupational hygiene	: Keep good industrial hygiene. Wash hands before breaks and immediately after using the product. When using do not eat, drink or smoke. Keep away from food, drink and animal feedingstuffs. Keep work clothes separately. Take off contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage	: Keep in a dry, cool and well-ventilated place. Do not store near or with any of the incompatible materials listed in section 10. Bund storage facilities to prevent soil and water pollution in the event of spillage. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Packaging materials	: Keep/Store only in original container.


7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values :

Petroleum, Crude oil (8002-05-9)		
Bulgaria	OEL TWA (mg/m ³)	1600 mg/m ³
Latvia	OEL TWA (mg/m ³)	5 mg/m ³ 4 mg/m ³ (dust)
Slovakia	NPHV (Hraničná) (mg/m ³)	3 mg/m ³ (liquid aerosol, fume)
Petroleum, Crude oil (8002-05-9)		
Bulgaria	OEL TWA (mg/m ³)	1600 mg/m ³
Latvia	OEL TWA (mg/m ³)	5 mg/m ³ 4 mg/m ³ (dust)
Slovakia	NPHV (Hraničná) (mg/m ³)	3 mg/m ³ (liquid aerosol, fume)

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Recommended monitoring procedures : Personal air monitoring
Room air monitoring

8.2. Exposure controls

Personal protection equipment : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
Half-face mask (EN 140)
Full face mask (EN 136)
Filter type: A / P (EN 143)
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. (EN 137)

Hand protection : Wear chemically resistant gloves (tested to EN374) ,The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Eye protection : Use suitable eye protection. (EN166): Goggles

Body protection : Wear suitable protective clothing.

Thermal hazard protection : Not required under normal use.
Use dedicated equipment.

Engineering control measures : Provide adequate ventilation.
Organisational measures to prevent/limit releases, dispersion and exposure
Safe handling: see section 7 .
Use only outdoors or in a well-ventilated area.
Store locked up.
Take precautionary measures against static discharges.
Ensure that the equipment is adequately grounded.
Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.

Environmental exposure controls : Do not allow contact with soil, surface or ground water.
Comply with applicable Community environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance : liquid

Colour : black

Odour : petroleum hydrocarbon odour, rotten-egg like

Odour threshold : No data available

pH : No data available

Melting point/freezing point : -30 - 30 °C

Freezing point : No data available


Initial boiling point and boiling range : -1 - 565 °C (at 1013 hPa (with decomposition))

Flash point : -7 - 32 °C (sweet and sour)

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable, liquid

Upper/lower flammability or explosive limits : No data available

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Vapour pressure	: 408 hPa (at 37.7 °C)
Vapour density	: No data available
Density	: 0,8 - 1 g/cm ³ (at 15 °C)
Relative density	: No data available
Water solubility	: No data available
Solubility in different media	: No data available
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Explosive properties	: Not applicable The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.
Oxidising properties	: Not applicable The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising properties.

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity : Extremely flammable liquid and vapour.
Reference to other sections: 10.4 & 10.5

10.2. Chemical stability

Stability : The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions : Vapours can form explosive mixtures with air.

10.4. Conditions to avoid

Conditions to avoid : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Safe handling: see section 7

10.5. Incompatible materials

Incompatible materials : Oxidising substances, Safe handling: see section 7

10.6. Hazardous decomposition products


Hazardous decomposition products : Reference to other sections: 5.2

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

Petroleum, Crude oil (8002-05-9)	
LD50/oral/rat	> 5000 mg/kg
LD50/dermal/rabbit	> 2000 mg/kg

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Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met.) pH: No data available
Serious eye damage/eye irritation	: Causes serious eye irritation. pH: No data available
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met.)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met.)
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met.)
STOT-single exposure	: May cause drowsiness or dizziness.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: May be fatal if swallowed and enters airways.

Other information

Symptoms related to the physical, chemical and toxicological characteristics, For further information see section 4

SECTION 12: Ecological information

12.1. Toxicity

Toxicity : Toxic to aquatic life with long lasting effects.

Petroleum, Crude oil (8002-05-9)	
LC50 fish 1	29000 - 80000 mg/l (Cyprinodon variegatus); 6000 - 14800 mg/l (Fundulus similis)
EC50 Daphnia 1	< 0,26 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

12.2. Persistence and degradability

Persistence and degradability : No data available

12.3. Bioaccumulative potential

Bioaccumulation : No data available

Partition coefficient n-octanol/water : No data available

12.4. Mobility in soil


Mobility : No data available

12.5. Results of PBT and vPvB assessment

PBT/vPvB data : Not applicable

12.6. Other adverse effects

Other information : No data available

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Product waste: : Do not allow contact with soil, surface or ground water.
Dispose of empty containers and wastes safely.
Safe handling: see section 7
Refer to manufacturer/supplier for information on recovery/recycling.
Recycling is preferred to disposal or incineration
If recycling is not possible, eliminate in accordance with local valid waste disposal regulations
- Contaminated packaging : Never use pressure to empty container.
Do not pierce or burn, even after use.
Handle contaminated packages in the same way as the substance itself.
Dispose according to legislation.
- List of proposed waste codes/waste designations in accordance with EWC : This material and its container must be disposed of as hazardous waste.
Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

14.1. UN number

UN number : 3295

14.2. UN proper shipping name

Proper Shipping Name : HYDROCARBONS, LIQUID, N.O.S.(Petroleum, Crude oil)
Proper shipping name IATA/IMDG : HYDROCARBONS, LIQUID, N.O.S. (Petroleum, Crude oil)

14.3. Transport hazard class(es)

14.3.1. Overland transport

Class(es) : 3 - Flammable liquid
Hazard identification number (Kemler No.) : 33
Classification code : F1
ADR/RID-Labels : 3 - Flammable liquid



14.3.2. Inland waterway transport (ADN)

Class (UN) : 3

14.3.3. Transport by sea


Class or Division : 3 - flammable liquids

14.3.4. Air transport

Class or Division : 3 - flammable liquids

14.4. Packing group

Packing group : I

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14.5. Environmental hazards

Environmental hazards : N



Other information : No supplementary information available.

14.6 Special precautions for user

Special precautions for user : No data available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Code: IBC : No data available.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006 :

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008 : Petroleum, Crude oil

28. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as Carcinogen category 1A or 1B (Table 3.1) or Carcinogen category 1 or 2 (Table 3.2) and listed as follows: Carcinogen category 1A (Table 3.1)/Carcinogen category 1 (Table 3.2) listed in Appendix 1 Carcinogen category 1B (Table 3.1)/Carcinogen category 2 (Table 3.2) listed in Appendix 2 : Petroleum, Crude oil


40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not. : Petroleum, Crude oil

This product contains an ingredient according to the candidate list of Annex XIV of the REACH Regulation 1907/2006/EC. : none

Authorisations : Not applicable

Take note of Directive 92/85/EEC on the safety and health at work of pregnant workers.
Take note of Directive 94/33/EC on the protection of young people at work.

15.1.2. National regulations

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DE : WGK	:	1
DE : German storage class (LGK)	:	LGK 3 - Flammable liquid materials (Flashpoint < 55 °C)
DE : TA-Luft	:	Carcinogenic substances
DE : Technische Regeln für Gefahrstoffe (TRGS)	:	applicable
DE : Risk classification according to VbF	:	A I - Liquids with a flashpoint below 21°C
FR : Installations classées	:	143x, 117x
NL : ABM	:	3 - A - May cause cancer.
NL : NeR (Nederlandse emissie Richtlijn)	:	Organic substances in vapour or gaseous form
DA : At-vejledning C.2.1 (Kræftfarlige stoffer og materialer)	:	Crude oil
NO : Produktforskriften (FOR 2004-06-01 nr 922)	:	Carcinogen

15.2. Chemical safety assessment

Chemical Safety Assessment : For this substance a chemical safety assessment has not been carried out.
This substance is exempted according to REACH Article 2(7) and Annex V.


SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Aquatic Chronic 2	:	Hazardous to the aquatic environment - chronic hazard category 2
Asp. Tox. 1	:	Aspiration hazard, Category 1
Carc. 1B	:	Carcinogenicity, Category 1B
Eye Irrit. 2	:	Serious eye damage/eye irritation Category 2
Flam. Liq. 1	:	Flammable liquids, Category 1
STOT RE 2	:	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	:	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H224	:	Extremely flammable liquid and vapour.
H304	:	May be fatal if swallowed and enters airways.
H319	:	Causes serious eye irritation.
H336	:	May cause drowsiness or dizziness.
H350	:	May cause cancer.
H373	:	May cause damage to organs through prolonged or repeated exposure.
H411	:	Toxic to aquatic life with long lasting effects.
R12	:	Extremely flammable.
R45	:	May cause cancer.
R48/21/22	:	Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.
R51/53	:	Toxic 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.
F+	:	Extremely flammable
N	:	Dangerous for the environment
Xn	:	Harmful

Key literature references and sources :
for data

Abbreviations and acronyms	:	ABM = Algemene beoordelingsmethodiek ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods Code
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LEL = Lower Explosive Limit/Lower Explosion Limit
 UEL = Upper Explosion Limit/Upper Explosive Limit
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
 BTT = Breakthrough time (maximum wearing time)
 DMEL = Derived minimal effect level
 DNEL = Derived No Effect Level
 EC50 = Median Effective Concentration
 EL50 = Median effective level
 ErC50 = EC50 in terms of reduction of growth rate
 ErL50 = EL50 in terms of reduction of growth rate
 EWC = European Waste Catalogue
 LC50 = Median lethal concentration
 LD50 = Median lethal dose
 LL50 = Median lethal level
 NA = Not applicable
 NOEC = No observed effect concentration
 NOEL: no-observed-effect level
 NOELR = No observed effect loading rate
 NOAEC = No observed adverse effect concentration
 NOAEL = No observed adverse effect level
 N.O.S. = Not Otherwise Specified
 OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
 PNEC = Predicted No Effect Concentration
 Quantitative structure-activity relationship (QSAR)
 STOT = Specific Target Organ Toxicity
 TWA = time weighted average
 VOC = Volatile organic compounds
 WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)

The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 67/548/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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