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	KEROSENE	Supersedes :
1. IDENTIFICATION C	OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY	/UNDERTAKING

Commercial Product Name	: KEROSENE
Chemical name of the substance	: Kerosene
Specific use(s)	: Fuel
Company	: Topaz Energy Topaz House Beech Hill Clonskeagh -Dublin 4, Ireland Tel.:+353 1 202 8888 Fax:+353 1 203 9888 E-mail:safetydatasheets@topazenergy.ie
Emergency telephone number	: +353 1 808 8232
2. HAZARDS IDENTIFICATION	
Classification	: The product is classified as dangerous in accordance with Directive 67/548/EEC.
Xn : HarmfulN : Dangerous for th environment	ne
Most important hazards	 R10 - Flammable. R38 - Irritating to skin. R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65 - Harmful: may cause lung damage if swallowed.
CLP-Classification	: The product is classified as dangerous in accordance with Directive 1272/2008/EEC.
Signal word	: Danger
CLP Hazard statements	 H226 - Flammable liquid and vapour. H304 - May be fatal if swallowed and enters airways. H315 - Causes skin irritation. H336 - May cause drowsiness or dizziness. H411 - Toxic to aquatic life with long lasting effects.
Main symptoms Inhalation	 May cause irritation of respiratory tract. Cough Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

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	Inhalation of high vapour concentrations can cause narcosis.	e CNS-depression and
Skin contact	: Irritating to skin. Redness Repeated exposure may cause skin dryness or cra	acking.
Eye contact	: May cause eye irritation. Redness Repeated or prolonged exposure: Inflammation Ulceration	
Ingestion	 Smallest quantities reaching the lungs through swave vomiting may result in lung oedema or pneumonia Ingestion may cause gastrointestinal irritation, nau diarrhoea. 	
Environmental properties	: Toxic to aquatic organisms, may cause long-term aquatic environment.	adverse effects in the

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance name	Values (%)	CAS no	EC No	EC Index	Symbol(s):	R-phrase(s)
Kerosine (petroleum), hydrodesulfurized	0 - 100	64742-81-0	265-184-9	649-423-00-8	Xn, N	R10, R38, R51/53, R65
Kerosine (petroleum)	0 - 100	8008-20-6	232-366-4	649-404-00-4	Xn, N	R10, R38, R65, R51/53

Full text of R-phrases: See section 16.

Substance name	Values (%)	CAS no	EC No	EC Index	CLP pictograms	CLP Hazard statement s
Kerosine (petroleum), hydrodesulfurized	0 - 100	64742-81-0	265-184-9	649-423-00-8	GHS02,GHS07,GHS0 8,GHS09	H226,H304, H315,H336, H411
Kerosine (petroleum)	0 - 100	8008-20-6	232-366-4	649-404-00-4	GHS02,GHS07,GHS0 8,GHS09	H226,H304, H315,H336, H411

Full text of the H-statements:

See section 16.

4. FIRST AID MEASURES	
First aid measures	
Inhalation	 May cause irritation of respiratory tract Cough- Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting Inhalation of high vapour concentrations can cause CNS-depression and narcosis. Move to fresh air. Keep at rest. In case of shortness of breath, give oxygen.
Skin contact	: Irritating to skin Redness- Repeated exposure may cause skin dryness or cracking. Take off contaminated clothing and shoes immediately.

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	After contact with skin, wash immediately with ple If skin irritation persists, call a physician.	enty of soap and water.
Eye contact	: May cause eye irritation Redness- Repeated or Inflammation- Ulceration Rinse immediately with plenty of water, also unde minutes. If pain persists, call a physician.	
Ingestion	 Smallest quantities reaching the lungs through sw vomiting may result in lung oedema or pneumoni gastrointestinal irritation, nausea, vomiting and di Call a physician immediately. Do NOT induce vomiting. Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious 	a Ingestion may cause arrhoea. person.
Additional advice	: Show this safety data sheet to the doctor in atten Treat symptomatically.	dance.

5. FIRE-FIGHTING MEASURES

Fire Hazard	: Flammable.
Suitable extinguishing media	: Dry chemical Carbon dioxide (CO2) Water spray Foam
Extinguishing media which shall not be used for safety reasons	: High volume water jet
Specific hazards	: The pressure in sealed containers can increase under the influence of heat.
	Fire or intense heat may cause violent rupture of packages. In the event of fire, cool tanks with water spray.
	Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread along floors.
	Flash back possible over considerable distance. Burning produces noxious and toxic fumes.
	In case of fire hazardous decomposition products may be produced such as:
	Carbon oxides nitrogen oxides (NOx)
	Sulphur oxides Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for fire-fighters	0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions :	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid contact with skin and eyes. Do not breathe vapours or spray mist. Wear personal protective equipment. See also section 8.
Environmental precautions :	Do not flush into surface water or sanitary sewer system.

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Methods for cleaning up	:	Remove all sources of ignition.	
		Do not smoke. Ensure adequate ventilation. Clean-up methods - small spillage Prevent further leakage or spillage if safe to do s Soak up with inert absorbent material. Dispose of in accordance with local regulations. After cleaning, flush away traces with water. Clean-up methods - large spillage Keep people away from and upwind of spill/leak. Prevent further leakage or spillage if safe to do s Dam up. Hose down gases, fumes and/or dust with water Collect and dispose of waste product at an author After cleaning, flush away traces with water. Local authorities should be advised if significant contained. Sweep up and shovel into suitable containers for	o. orised disposal facility. spillages cannot be
7. HANDLING AND S	TORAGE		
Storage	:	Keep containers tightly closed in a dry, cool and Store in original container. Keep in a bunded area. Keep away from open flames, hot surfaces and Do not store near or with any of the incompatible 10. Keep away from food, drink and animal feedings	sources of ignition. materials listed in section
Handling	·	 Handle in accordance with good industrial hygiel Take necessary action to avoid static electricity of cause ignition of organic vapours). Ensure all equipment is electrically grounded be operations. Do not use pressure to empty drums. Do not smoke. Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Wear personal protective equipment. See also section 8. Ensure adequate ventilation. When using do not eat or drink. Do not pierce or burn, even after use. Do not sprincandescent material. Do not burn, or use a cutting torch on, the empty 	ne and safety practice. discharge (which might fore beginning transfer ray on a naked flame or any
Packaging material	:	glass,metal containers,Plastic jerrican	
Specific use(s)	:	Fuel	
8. EXPOSURE CONT	ROLS/PERSONA	L PROTECTION	

Personal protective equipment	
Respiratory protection	: In case of insufficient ventilation wear suitable respiratory equipment. respirator with A filter
Hand protection	 Nitrile rubber Neoprene gloves EN374 The selection of specific gloves for a specific application and time of use in a

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	working area, should also take into account other faspace, such as (but not limited to): other chemicals physical requirements (protection against cutting/d protection), and the instructions/specification of the	that are possibly used, rilling, skill, thermal
Eye protection	: Safety glasses with side-shields conforming to EN ² Goggles	166
Skin and body protection	: chemical-resistant overalls Chemical resistant apron	
Hygiene measures	: Handle in accordance with good industrial hygiene Wash hands before breaks and immediately after h Remove and wash contaminated clothing before re Eye wash bottle with pure water	nandling the product.
Engineering measures	: Ensure adequate ventilation.	
Environmental exposure controls	: Do not flush into surface water or sanitary sewer sy	/stem.
Exposure limit(s)		
Component	: Kerosine (petroleum), hydrodesulfurized (64742	2-81-0)
TLV-TWA (mg/m³)	: 200 (BE, PT) ; 250 (SE); 250 (UT4, Kraftstoff, DE)	
Component	: Kerosine (petroleum) (8008-20-6)	
TLV-TWA (mg/m³)	: 200 (BE, ES) ; 100 (PL); 250 (UT4, Kraftstoff, DE)	
TLV-STEL (mg/m ³)	: 300 (PL)	

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Colour Odour	: liquid : colourless,Pale coloured,yellow : hydrocarbon-like
pH Boiling point/boiling range Melting point/range Flash point Decomposition temperature Autoignition temperature Flammability (solid, gas) Explosive properties Oxidizing properties Evaporation rate Vapour pressure Vapour pressure Vapour density Water solubility Viscosity Density	 Not applicable 150 - 300 °C not applicable > 38 °C (Abel) No data available > 190 °C not applicable L.E.L. 0.5 vol% U.E.L. 7 vol% not applicable No data available 0,1-30 @ 20°C hPa >1 insoluble <4 @ 40°C m²/s 0.77 - 0.84 g/cm³ (15°C)
Partition coefficient: n-octanol/water	: 2-6

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10. STABILITY AND REACTIVIT	γ	
Stability	: Stable under normal conditions.	
Hazardous decomposition products	: Burning produces noxious and toxic fumes. Possible decomposition products are: Carbon oxides	
Incompatible materials	: Oxidizing agents	
Conditions to avoid	: Heat, flames and sparks.	
11. TOXICOLOGICAL INFORMA	TION	
General Information		
Acute toxicity		
Component	: Kerosine (petroleum), hydrodesulfurized	(64742-81-0)
LD50/oral/rat	: > 5000 mg/kg	
LD50/dermal/rabbit	: > 2000 mg/kg	
LC50/inhalation/4h/rat	: > 5,2 mg/l/4h	
Component	: Kerosine (petroleum) (8008-20-6)	
LD50/oral/rat	: > 5000 mg/kg	
LD50/dermal/rabbit	: > 2000 mg/kg	
LC50/inhalation/4h/rat	: > 5,28 mg/l/4h	
Inhalation	 May cause irritation of respiratory tract. Cough Inhalation of high vapour concentrations may headache, dizziness, tiredness, nausea and Inhalation of high vapour concentrations can narcosis. 	vomiting.
Skin contact	: Irritating to skin. Redness	or orocking
Eve contact	Repeated exposure may cause skin dryness	or cracking.
Eye contact	: May cause eye irritation. Redness Repeated or prolonged exposure: Inflammation Ulceration	
Ingestion	 Smallest quantities reaching the lungs throug vomiting may result in lung oedema or pneur Ingestion may cause gastrointestinal irritation diarrhoea. 	monia.
Chronic toxicity		
Chronic toxicity	: Chronic exposure Liver and kidney injuries may occur. Blood disorder may occur after prolonged inf Repeated exposure may cause skin dryness	
Sensitisation	: No sensitization responses were observed.	
carcinogenic effects	: No adverse effects are expected.	

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Reproductive toxicity	: No adverse effects are expected.	I

12. ECOLOGICAL INFORMATIO	N	
Ecotoxicity effects	:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Component	:	Kerosine (petroleum), hydrodesulfurized (64742-81-0)
LC50/96h/fish	:	45 mg/l (Pimephales Promelas); 1740 mg/l (Lepomis macrochirus)
Mobility	:	This telephone number is available 24 hours per day, 7 days per week.
Persistence and degradability	:	No data available
Bioaccumulation	:	May cause bioaccumulation.
Partition coefficient: n-octanol/water	:	2 - 6
Further information	:	Prevent product from entering drains. Dispose of as hazardous waste in compliance with local and national regulations.

13. DISPOSAL CONSIDERATIONS		
Waste from residues / unused products	:	Where possible recycling is preferred to disposal or incineration. Do not burn, or use a cutting torch on, the empty drum. Dispose of in accordance with local regulations. Empty containers should be transported/delivered using a registered waste carrier to local recyclers for disposal.
Additional ecological information	:	Do not flush into surface water or sanitary sewer system.
Codes of waste (2001/573/EC, 75/442/EEC, 91/689/EEC)	:	The following Waste Codes are only suggestions: 13 07 03* - other fuels (including mixtures) 15 01 10* - packaging containing residues of or contaminated by dangerous substances Waste codes should be assigned by the user based on the application for which the product was used.

ADR danger labels <u>ADR/RID</u>	:	
Proper shipping name	:	KEROSENE
UN-No	:	1223
Class	:	3
Packing group	:	III
ADNR ADNR class ADNR classification code	:	3 - Flammable liquids F1

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	REROJENE	
ADNR UN number	: 1223	
IMDG		
Proper shipping name	: KEROSENE	
UN-No	: 1223	
Class	: 3	
Packing group	: 111	
EmS	: F-E ; S-E	
IMDG Limited Quantities	: 5L	
ICAO/IATA		
Proper shipping name	: KEROSENE	
UN-No	: 1223	
Class	: 3	

Tunnel restriction code C/E

Kerosine (petroleum), hydrodesulfurized

The product is classified as dangerous in accordance with Directive

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in

S61 - Avoid release to the environment. Refer to special instructions/Safery

S62 - If swallowed, do not induce vomiting: seek medical advice immediately

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67/548/EEC.

KEROSENE

Kerosene

265-184-9

64742-81-0

Xn

Xn - Harmful

data sheets.

R10 - Flammable. R38 - Irritating to skin.

the aquatic environment.

S24 - Avoid contact with skin.

and show this container or label.

Kerosine (petroleum)

N

N - Dangerous for the environment

R65 - Harmful: may cause lung damage if swallowed.

S43 - In case of fire, use foam, dry powder or sand

S23 - Do not breathe gas/fumes/vapour/spray.

UN packing group

Other information (transport)

Commercial Product Name

Chemical name of the substance

Classification

EC No

CAS no

Contains

Contains

Symbol(s):

R-phrase(s)

S-phrases

15. REGULATORY INFORMATION

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CLP-Classification	: The product is classified as dangerous in accordanc 1272/2008/EEC.	e with Directive
CLP pictograms		
Signal word	: Danger	
CLP Hazard statements	 H226 - Flammable liquid and vapour. H304 - May be fatal if swallowed and enters airways H315 - Causes skin irritation. H336 - May cause drowsiness or dizziness. H411 - Toxic to aquatic life with long lasting effects. 	3.
CLP Precautionary statement	 P261 - Avoid breathing dust/fume/gas/mist/vapours/ P280 - Wear protective gloves/protective clothing/ey protection. P273 - Avoid release to the environment P331 - Do NOT induce vomiting P301+P310 - If swallowed, immediately call a docto P370 + P378 - In case of fire: Use dry sand, dry che foam for extinction. 	r.
Contains	: Kerosine (petroleum), hydrodesulfurized, Kerosine (p	petroleum)
WGK	: 1	

16. OTHER INFORMATION

 R10 -Flammable. R38 -Irritating to skin. R51/53 -Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65 -Harmful: may cause lung damage if swallowed.
 H226 -Flammable liquid and vapour. H304 -May be fatal if swallowed and enters airways. H315 -Causes skin irritation. H336 -May cause drowsiness or dizziness. H411 -Toxic to aquatic life with long lasting effects. http://ecb.jrc.it Classification and labelling of petroleum substances according to the EU dangerous substances directive (CONCAWE

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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