

SAFETY DATA SHEET

According to Regulation (EC) No. 453/2010 Revision date: 01/01/19

SECTION 1: IDENT	IFICATION OF THE SUBSTANCE / MIXTURE	& OF THE COMPANY UNDERTAKING	
1.1	PRODUCT IDENTIFIER		
	PRODUCT FORM	Mixture	
	TRADE NAME	i-FLAME	
	PRODUCT GROUP	Trade Product	
1.2	RELEVANT IDENTIFIED USES OF THE	SUBSTANCE / MIXTURE & USES ADVIS	ED AGAINST
1.2.1	RELEVANT IDENTIFIED USES	Fuel	
1.2.2	USES ADVISED AGAINST	No uses advised against identified	
1.3	DETAILS OF THE SUPPLIER OF THE S	AFETY DATA SHEET	
	ADDRESS	Innovo Energy Limited	
		80-82 Dudley Road	
		Lye, Stourbridge, DY9 8ET	
	TELEPHONE NUMBER	+44 (0) 330 555 3000	
	EMAIL ADDRESS	hello@innovo.uk.com	
	WEBSITE	www.innovo.uk.com	
1.4	EMERGENCY TELEPHONE NUMBER		
	24 HOURS	+44 (0) 330 555 3000	
SECTION 2: HAZA	RDS IDENTIFICATION		
2.1	CLASSIFICATION OF THE SUBSTANC	E OR MIXTURE	
2.1.1	CLASSIFICATION ACCORDING TO REC	GULATION (EC) No 1272/2008 [CLP]	
	ΕΙ ΔΜΜΑΒΙ Ε ΠΟΙ ΙΙΟ CAT 3	Н226	
		H220	
	SKIN IRRITANT CAT 2	H315	
	STOT SE CAT 3	H336	
	STOT BE CAT 2	H373	
	ASP TOX CAT 1	H304	
	AQUATIC CHRONIC CAT 2	H411	
	FULL TEXT OF H-PHASES: SECTION 1	5	
242			
2.1.3	ADVERSE PHYSIOCHEIVIICAL, HUIVIAI	N HEALTH & ENVIRONMENTAL EFFECTS	
2.2	LABEL ELEMENTS – LABELLING ACC	ORDING TO REGULATION (EC) No 1272,	/2008 [CLP]
2.2.1	HAZARD PICTOGRAMS (CLP)	$\wedge \wedge \wedge$	^
			3K
		GHS02 GHS07 GHS08	GSH09
2.2.2	SIGNAL WORD (CLP)	Danger	
2.2.3	HAZARD STATEMENTS (CLP)	H226 – Flammable liquid ad vapour	
		H304 – May be fatal if swallowed er	ntering airways
		H315 – Causes skin irritation	an mays
		H317 - May cause an allergic skin re	action
		H332 - Harmful if inhaled	
		H336 - May cause drowsiness or diz	ziness



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224	DRECALITIONARY STATEMENTS (CLD)	H373 - May cause damage to organs through prolonged or repeated exposure H411 - Toxic to aquatic life with long lasting effects P201 - Obtain special instructions before use
∠.∠.↔	PRECAUTIONART STATEMENTS (CEP)	 P210 - Keep away from heat/sparks/open flames/hot surfaces - no smoking P280 - Wear protective gloves/protective clothing and eyewear / face protection P271 - Use only outdoors or in a well-ventilated area P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor P308+P313 - IF exposed or concerned: Get medical advice/attention P331 - Do NOT induce vomiting

2.3 **OTHER HAZARDS** THIS MIXTURE DOES NOT MEET THE PBT CRITERIA OF REACH, ANNEX XIII

THIS MIXTURE DOES NOT MEET THE VPVB CRITERIA OF REACH, ANNEX XIII

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS 3.1 **SUBSTANCES** NOT APPLICABLE 3.2 MIXTURES SEE TABLE BELOW NAME **PRODUCT IDENTIFIER** % **CLASSIFICATION ACCORDING TO** REGULATION (EC) No 1272/2008 [CLP] Petroleum (CAS No.) 64742-81-0 <80 Flam. Liq. 3, H226 Hydrodesulfurized (EC no) 265-184-9 Skin Irrit. 2, H315 (EC index no) 649-423-00-8 STOT SE 3, H336 Asp. Tox 1, H304 Aquatic Chronic 2, H411 Flam. Liq. 3, H226 Oil, Base DMSO (CAS No.) 74869-22-0 <80 Asp. Tox. 1, H304 extract <3% (IP346) (EC no) 278-012-2 Skin Irrit. 2, H315 (EC Index No.) 649-484-00-0 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Aquatic Chronic 2, H411

FULL TEXT OF R-, H- AND EUH-PHASES: SECTION 16

SECTION 4: FIRST AID MEASURES				
4.1	DESCRIPTION OF FIRST AID MI	EASURES		
	AFTER INHALATION	> Remove victim to fresh air and keep at rest in a		
	FIRST AID MEASURES	position comfortable for breathing. In case of		
		breathing difficulties administer oxygen. In case of		
		irregular breathing or respiratory arrest! provide		
		artificial respiration. Seek medical advice.		

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AFTER SKIN CONTACT FIRST AID MEASURES

AFTER EYE CONTACT FIRST AID MEASURES

AFTER INGESTION FIRST AID MEASURES > Remove contaminated clothing and shoes. Rinse and then wash skin with water and soap. If skin irritation occurs: Get medical advice/attention. If high-pressure injuries occur, immediately seek professional medical attention. Do not wait for symptoms to develop.

> Rinse immediately and plentifully with water, also under the eyelids, for at least 20 minutes.
 Remove contact lenses, if present and easy to do.
 Continue rinsing. In all cases of doubt, or when symptoms persist, seek medical advice.
 > Obtain medical attention immediately. Do not induce vomiting. Do not give anything by mouth because of risk of material entering the lungs and causing lung damage. If person is drowsy or unconscious and vomiting, place on left side with head down. If possible, do not leave unattended and observe closely for adequacy of breathing.

4.2

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

AFTER INHALATION SYMTOM/INJURIES

AFTER SKIN CONTACT

SYMTOM/INJURIES

SYMTOM/INJURIES

AFTER EYE CONTACT SYMTOM/INJURIES AFTER INGESTION > If material enters lung, signs and symptoms may include coughing, chocking, wheezing, difficulty in breathing, chest congestion, shortness of breath and/or fever. Inhalation of vapours may cause respiratory irritation. In high concentrations may cause narcotic effects.

Symptoms may include dizziness, headache, nausea and loss of co-ordination. CNS depression. > Swelling of the skin, burning, irritation (itching, redness, blistering).

> Slight eye irritant. Redness.

> Few or no symptoms expected. If any, nausea and diarrhoea might occur

May cause damage to organs through prolonged or repeated exposure.

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

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and can reignite. Containers exposed to heat may

burst due to increase in pressure.

4.3

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT TREAT SYMPTOMATICALLY. SYMPTOMS MAY BE DELAYED

SECTION 5: FIREFIGHT	ING MEASURES	
5.1	EXTINGUISHING MEDIA	
	SUITABLE EXTINGUISING MEDIA	Carbon Dioxide (CO2), dry chemical powder, foam
	UNSUITABLE EXTINGUISING MEDIA	Do not use water jets since it may cause the fire to
		spread
5.2	SPECIAL HAZARDS ARISING FROM TH	E SUBSTANCE OR MIXTURE
	FIRE HAZARD	Flammable liquid and vapour: Vapour may form explosive mixture with air. Vapour is heavier than air and may accumulate in confined spaces. Vapours may travel considerable distances to ignition sources where they can ignite, flash back or explode. The product will float on surface water

5.3	ADVICE FOR FIREFIGHTERS	
5.3.1	FIREFIGHTING INSTRUCTIONS	Cool down the containers exposed to heat with a water spray. Keep upwind.!
5.3.2	PROTECTIVE EQUIPMENT	Fully enclosed impervious protective suit with integral or tight-fitting gloves, boots, self- contained or supplied air respirator must be worn
5.3.3	OTHER INFORMATION	A layer of floating combustible liquid may be present. Do not allow run-off from firefighting to enter drains or water courses. Dilution water from firefighting can cause pollution.

SECTION 6: ACCIDENTAL RELEASE MEASURES			
6.1	PERSONAL PRECAUTIONS, PROTECTIV	'E EQUIPMENT AND EMERGENCY PROCEDURES	
6.1.1	PROTECTIVE EQUIPMENT	For further information refer to Section 8 : exposure – controls / personal protections	
	EMERGENCY PROCEDURES	Stop leak if safe to do so. No flames. No sparks, Eliminate all sources of ignition. Keep upwind. Avoid release to the environment	

6.2	ENVIRONMENTAL PRECA	UTIONS
	GENERAL	Collect spillage. Do not allow to enter drains,
		sewers or watercourses. Spillages or uncontrolled
		discharges into watercourses must be alerted to
		the Environment Agency or other appropriate



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regulatory body. If spill occurs on water notify the appropriate authorities and advise shipping of any hazard.

6.3	METHODS AND MATERIAL FOR	CONTAINMENT AND CLEANING UP
	CONTAINMENT	Avoid release to the environment. Refer to special instructions / Safety Data Sheet(s). Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Contain! spill, place into drums for proper disposal.
	CLEANING UP METHODS	Stop leak if safe to do so. Eliminate all sources of ignition, avoid sparks, flames and do not smoke in risk area. Small spillages: Collect all waste in suitable and labelled containers and dispose according to local legislation. Absorb remaining liquid with sand or inert absorbent and! remove to safe place. This material and its container must be disposed of in a safe way, and as! per local legislation. For large spills, dike with dirt, then remove by vacuum truck for disposal.
	OTHER INFORMATION	It spilled, may cause the floor to be slippery
6.4	REFERENCE TO OTHER SECTION	S

REFERENCE TO OTHER SECTIONS REFER TO SECTIONS 8 AND 13

SECTION 7: HANDLING	G AND STORAGE	
7.1	PRECAUTIONS FOR SAFE HANDLING	
	SAFE HANDLING	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Use explosion-proof electrical, ventilating and lighting equipment.
		Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well- ventilated area. Provide adequate ventilation, including local extraction, to ensure occupational exposure limits are not exceeded. Avoid breathing vapours/spray. Avoid contact with skin and eyes. Wear suitable personal protective equipment (See Section 8).

Do not eat, drink or smoke in the vicinity of the product. Wash thoroughly after handling. Take off

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contaminated clothing and wash it before reuse. Contaminated clothing should be thoroughly cleaned or disposed of as hazardous waste.

Product transfer

Electrostatic charges may be generated during pumping. Ensure electrical continuity by bonding all equipment. Avoid splash filling. Wait 2 minutes after tank filling (for tanks such as those on road tanker vehicles) before opening hatches or manholes. Wait 30 minutes after tank filling (for large storage tanks) before opening hatches or manholes. Contamination resulting from product transfer may give rise to light hydrocarbon vapour in the headspace of tanks that have previously contained gasoline. This vapour may explode if there is a source of ignition. Partly filled containers present a greater hazard than those that are full, therefore handling, transfer and sampling activities need special care.

Tank cleaning

Cleaning, inspection and maintenance of storage tanks is a specialist operation that requires the implementation of strict procedures and precautions. These include issue of work permits, gas-freeing of tanks, using a manned safety harness, lifelines and wearing air-supplied breathing apparatus. Prior to entry and while cleaning is underway, the atmosphere within the tank must be monitored using an oxygen meter and explosimeter. Additional precautions are required where the tank may have previously contained leaded gasoline.

HYGEINE MEASURES	Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and!
	when leaving work. Handle in accordance with
	good industrial hygiene and safety practice.
	Separate working clothes from town clothes.
	Launder separately.

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-	_

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

TECHICAL MEASURES

STORAGE CONDITIONS

Ensure adequate ventilation of the storage area. Provide local exhaust or general room ventilation. Keep container closed when not in use. Locate tanks away from heat and other sources of ignition. Never enter a storage tank without breathing apparatus unless the tank has been well

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7.3 SPECIFIC END USE(S) REFER TO SECTION 1

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

Workplace exposure limites Source: EH40/2005, 2nd Ed., 2011 None assigned.

Other exposure limits

Source: American Conference of Governmental Industrial Hygienists (ACGIH)

Substance	Cas No.	LTEL (8 hr TWA)		STEL (15 min.)		Commonto
Substance		ppm	mg/m ³	ppm	mg/m ³	Comments
Petroleum,	64742 91 0		200			Skin
hydrodeslufurized	04742-01-0	-	200	-	-	SKIII

Skin: Can be absorbed through the skin

DNELs (Workers)

nnov

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Kerosene ingestion: 18.8 mg/kg bw/day

PNEC's

None Assigned

8.2	EXPOSURE CONTROLS	
	APPROPRIATE ENGINEERING CONTROLS	Provide adequate ventilation to ensure that occupational exposure limits are not exceeded. Local extraction may be required. Eye wash and quick-drench shower facilities should be available in the work area. Contaminated clothing and shoes should be thoroughly washed before reuse.
	PERSONAL PROTECTIVE EQUIPMENT	Goggles or safety glasses with side shields giving complete protection to eyes. (EN 166). Depending on conditions of use, close-fitting eye protection and a face shield may be necessary.
	HAND PROTECTION	Chemical-resistant gloves. (EN 374). Suitable glove material: nitrile, neoprene or PVC (breakthrough time > 240 minutes). Contact glove supplier to confirm suitable glove material, thickness and
	EYE PROTECTION	Goggles or safety glasses with side shields giving complete protection to eyes. (EN 166). Depending on conditions of use, close-fitting eye protection
	SKIN AND BODY PROTECTION	and a face shield may be necessary. Where airborne levels below the exposure limits cannot be maintained, wear an air-purifying respirator (EN 140) with a Type A/P2 filter or better suitable for organic gases and vapours with a boiling point above 65°C (EN 14387)
	RESPIRATORY PROTECTION	Where airborne levels below the exposure limits cannot be maintained, wear an air-purifying respirator (EN 140) with a Type A/P2 filter or better suitable for organic gases and vapours with a boiling point above 65°C. (EN 14387).

<u>SECTION 9</u>: PHYSICAL AND CHEMICAL PROPERTIES

9.1

INFORMATION ON BASIS PHYSICAL AND CHEMICAL PROPERTIES





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PHYSICAL STATE	Liquid
COLOUR	Clear. yellow / brown
ODOUR	Hydrocarbon-like
PH	N/A
MELTING POINT	No data available
SOLIDIFICATION POINT	No data available
BOILING POINT	150 – 350 Deg C
FLASH POINT	> 50 Deg C
RELATIVE EVAPORATION RATE	No data available
FLAMMABILITY (SOLID, GAS)	No data available
EXPLOSIVE LIMITS	No data available
VAPOUR PRESSURE	No data available
VAPOUR DENSITY	>1 (Air = 1)
RELATIVE DENSITY	>0.82 (Water = 1)
SOLUBILITY / LOG POW	No data available
SELF IGNITION TEMPERATURE	> 220 Deg C
DECOMPOSITION TEMPERATURE	No data available
VISCOSITY – KINEMATIC	2 – 3 CST (at 40 Deg C)
EXPLOSIVE PROPERTIES	Not explosive since none of the components have explosive properties
OXIDISING PROPERTIES	Not explosive since none of the components have

oxidising properties

OTHER INFORMATION

NO ADDITIONAL INFORMATION AVAILABLE

SECTION 10: STABILITY AND REACTIVITY		
10.1	REACTIVITY	
	Reacts with oxidising agents	
10.2	CHEMICLA STABILITY	
	Stable under normal conditions	
10.3	POSSIBILITY OF HAZARDOUS REACTIONS	
	No hazardous reactions expected during normal use	
10.4	CONDITIONS TO AVOID	
	Keep away from sources of ignition, hot surfaces, direct sunlight. Prevent accumulation of vapours. Contact with incompatible materials.	
10.5	INCOMPATIBLE MATERIALS	
	Oxidising agents. Reducing agents.	
10.6	HAZARDOUS DECOMPOSITION PRODUCTS	
	Combustion may liberate toxic fumes: Carbon monoxide, carbon dioxide, various hydrocarbons, nitrogen oxides, sulphur oxides, hydrogen sulphide.	

SECTION 11: TOXICOLOGICAL INFORMATION		
11.1	INFORMATION OF TOXIOLOGICAL EFF	ECTS
11.1.1	ACUTE TOXICITY	No data available on the mixture. The following data are for the product components:

9.2



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	PETROLEUM, HYDRODESULFURIZED: LD50 ORAL RAT LD50 DERMAL RABBIT LC50 INHALATION/RAT/VA	POUR	> 5000 mg/kg > 2000 mg.kg > 5.28 mg/L AIR (analytical) 4h
	Skin Corrosion/Irritation		Causes skin irritation. Repeated exposure may cause skin dryness or cracking
Serious eye dam	age / irritation	May cause s	slight irritation
Respiratory sens	sitisation	Not expecte	ed to be a respiratory sensitizer
Germ cell mutag	genicity	Suspected of causing genetic defects	
Reproductive toxicity		The product does now contain substances classified for reproduction toxicity above the classification thresholds	
Specific target organ toxicity – single exposure		May cause o	drowsiness or dizziness
Specific target organ toxicity – repeated exposure		May cause of repeated ex	damage to organs through prolonged or posure
Aspiration hazard		May be fatal if swallowed and enters airways. Risk of aspiration into lungs resulting in chemical pneumonia.	
INFORMATION ON LIKELY ROUTES OF EXPOSURE			
Inhalation		May cause drowsiness or dizziness	
Skin contact		Causes skin irritation. Repeated exposure may cause skin dryness or cracking	
Eye contact		May cause s	slight eye irritation
Ingestion		May be fata aspiration ir Ingestion m tract.	al if swallowed and enters aireays. Risk of nto lungs resulting in chemical pneumonia. ay cause irritation of the mouth and digestive

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

Skin contact causes irritation, redness and pain. Repeated exposure may cause skin dryness or cracking. Eye contact may cause slight irritation, watering, redness and pain. Inhalation of vapour may cause drowsiness or dizziness.



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Ingestion may cause irritation of the mouth and digestive tract. If swallowed, aspiration into lungs may result in chemical pneumonia.

Mixture versus substance information	No data available
Other information	None

SECTION 12: ECOLOGICAL INFORMATION

12.1

ΤΟΧΙCITY

Toxic to aquatic life with long lasting effects

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

Acute toxicity studies on samples of jet fuel and kerosene streams show acute toxicity values greater than 1 mg/L, typically in the range 1-10 mg/L. Tests were carried out on water accommodated fractions (WAF) in closed systems to prevent evaporative loss.

Petroleum hydrodesulfurised: EL50 (Daphnia magna): 1.4 mg/L, 48 h (WAF) NOEL (Daphnia magna): 0.3 mg/L, 48 h (WAF) NOEL (Daphnia magna): 0.48 mg/L, 21 days (WAF) LOEL (Daphnia magna): 1.2 mg/L, 21 days (WAF) EL50 (Daphnia magna): 0.89 mg/L, 21 days (reproduction)(WAF) EL50 (Raphidocelis subcapitata): 1-3 mg/L, 72 h (growth rate) (WAF) NOEL (Raphidocelis subcapitata): 1.0 mg/L, 72 h (growth rate) (WAF)

12.2	PERSISTENCE AND DEGRADABILITY	
		Inherently biodegradable. Some components are expected to be persistent under anaerobic conditions.
12.3	BIOACCUMULATIVE POTENTIAL	
		Some product components have the potential to bioaccumulate
12.4	MOBILITY IN SOIL	
		The product components are immiscible in water and will float on the surface of water. Lower molecular weight components will evaporate from the surface, reducing the risk to aquatic organisms. In air the volatile hydrocarbon components undergo photodegradation.

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The majority of components will be adsorbed onto sediment and will not be mobile. Adsorption is the predominant process on release to soil. Adsorbed components will slowly degrade in both water and soil. Large volumes may penetrate soil and could contaminate groundwater.

12.5

RESULTS OF PBT AND VPVP ASSESSMENT

This mixture does not meet the PBT criteria of REACH, annex XII This mixture does not meet the vPvB criteria of REACH, annex XII

SECTION 13: DISPOSAL CONSIDERATIONS		
13.1	WASTE TREATMENT METHODS	
13.1.1	REGIONAL LEGISLATION (WASTE)	Disposal must be done according to official regulations. Dispose of this material and its container to hazardous or special waste collection point. Classification according to the appropriate European Waste Catalogue (EWC). Suggested code is 13 07 03*
	WASTE TREATMENT METHODS	Keep the recovered product for subsequent recycling/recovery
	WASTE TREATMENT	Empty containers should be taken for recycle,
	RECCOMENDATIONS	recovery or waste in accordance with local regulation. Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Do not puncture, cut or weld uncleaned drums
	ECOLOGY – WASTE MATERIALS	Do not allow into drains or water courses or dispose of where ground or surface waters may be affected

SECTION 14: TRANSPORT INFORMATION

14.1	UN NUMBER	
	UN	1202
14.2	UN PROPER SHIPPING NAME	
	PROPER SHIPPING NAME	GAS OIL or DIESEL FUEL or HEATING OIL, light (flash point not more than 60 Deg C)
	TRANSPORT DOCUMENTATION DESCRIPTION	UN 1201 GAS OIL or DIESEL or HEATING OIL, light, 3, III (D/E)





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14.3	TRANSPORT HAZARD CLASS(ES)	
	CLASS (UN)	3
	HAZARD LABELS (UN)	3
		W
		3
14.4	PACKAGING GROUP	
	PACKAGING GROUP (UN)	III
14.5	ENVIRONMENTAL HAZARDS	
	MARINE POLLUTANT	AV
		$\langle \Upsilon_2 \rangle$
		~
14.0		No supplementary information available
14.6.1	OVERIAND TRANSPORT	
11011	HAZARD IDENTIFICATION NUMBER	20
	(KEMLER NO)	50
	CLASSIFICATION CODE	F1
	ORANGE PLATES	20
		30
		1202
	TUNNEL RESTRICTION CODE	D/E
	LIMITED QUANTITIES (ADR)	5L
	EXPECTED QUANTITIES (ADR)	E1
1462	EAC CODE	3Y No additional information available
14.6.3	TRANSPORT BY AIR	No additional information available
14.7	TRANSPORT IN BULK ACCORDING TO	O ANNEX II MARPOL 73/78 AND IBC CODE
	N/A	
SECTION 15: REC	SULATORY INFORMATION	
15.1	SAFETY, HEALTH AND ENVIRONMEN	TAL REGULATIONS/LEGISLATION SPECIFIC FOR THE
	SUBSTANCE OR MIXTURE	
15.1.1	EU REGULATIONS	Safety, health and environmental

regulations/legislation specific for the substance

This Safety Data Sheet was prepared in accordance with EC Regulation (EC) No. 1907/2006 as amended. The product has been classified in accordance with Regulation (EC) No.

or mixture

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1272/2008 (CLP), Directive 67/548/EEC & Directive 1999/45/EC. Safety, health and environmental regulations/legislation specific for the substance or mixture This Safety Data Sheet was prepared in accordance with EC Regulation (EC) No. 1907/2006 as amended. The product has been classified in accordance with Regulation (EC) No. 1272/2008 (CLP), Directive 67/548/EEC & Directive 1999/45/EC. Safety, health and environmental regulations/legislation specific for the substance or mixture This Safety Data Sheet was prepared in accordance with EC Regulation (EC) No. 1907/2006 as amended. The product has been classified in accordance with Regulation (EC) No. 1272/2008 (CLP), Directive 67/548/EEC & Directive 1999/45/EC. No additional information available

15.1.2

NATIONAL REGULATIONS

 15.2
 CHEMICAL SAFETY ASSESSMENT (CSA)

 CSA HAS NOT BEEN ESTABLISHED

SECTION 16: OTHE	R INFORMATION	
16.1	OTHER INFORMATION	
	REFERENCES	Supplier's Safety Data Sheets
		ECHA disseminated REACH dossiers
		ECHA Classification and Labelling Inventory
		Approved Classification and Labelling Guide (Sixth edition)
		The Chemicals (Hazard Information and Packaging
		for Supply) Regulations 2009 Regulation (EC) No.
		1272/2008 of the European Parliament and of the council.
	ABBREVIATIONS AND ACRONYMS	CAS: Chemical Abstracts Service;
		EINECS: European Inventory of Existing
		Commercial Chemical Substances
		EC50: Effective Concentration 50%
		EL50: Effective Loading rate 50%
		LC50: Lethal Concentration 50%
		LD50: Lethal Dose 50%
		LL50: Lethal Loading rate 50%
		LOEL: Lowest Observed Effect Level
		NOEL: No Observed Effect Level
		PB1: Persistent, Bioaccumulative and Toxic.
		RMM: Risk Management Measures

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UVCB: Substance of Unknown or Variable composition, Complex reaction products or Biological materials vPvB: Very Persistent and Very Bioaccumulative WAF: Water Accommodated Fraction

16.2

FULL TEXT OF R-, H- AND EUH- PHASES

ACUTE TOX 4 (INHALATION)	Acute toxicity (inhalation) Category 4
AQUATIC ACUTE 1	Hazardous to the aquatic environment – Acute
	Hazard Category 1
AQUATIC CHRONIC 1	Hazardous to the aquatic environment – Chronic
	hazard category 1
AQUATIC CHRONIC 2	Hazardous to the aquatic environment – Chronic
	Hazard Category 2
ASP. TOX. 1	Aspiration hazard Category 1
CARC. 1B	Carcinogenicity Category 1B
CARC. 2	Carcinogenicity Category 2
FLAM. LIQ. 3	Flammable liquids Category 3
MUTA. 2	Flammable liquids Category 1, flammable liquids
	category 4
SKIN IRRIT. 2	Skin corrosion / irritation Category 2
SKIN SENS. 1	Skin sensitisation Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure)
	Category 2
STOT SE 3	Specific target organ toxicity (single exposure)
	Category 3
H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
H341	Suspected of causing cancer genetic defects
H350	May cause cancer
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged
	or repeated exposure
H411	Toxic to aquatic life with long lasting effects
R10	Flammable
R20	Harmful by inhalation
R38	Irritating to skin
R40	Limited evidence of a carcinogenic effect
R43	May cause sensitisation by skin contact
R45	May cause cancer
R48 / 21	Harmful: danger of serious damage to health by
	prolonged exposure in contact with 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



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R68	Possible risk of irreversible effects
Ν	Dangerous for the environment
Т	Toxic
XI	Irritant
XN	Harmful

SDS EU (REACH ANNEX II)

Disclaimer:

This safety data sheet contains important information to ensure the safe storage, handling and use of this product, it does not however constitute an assessment of workplace risks.

Users are advised to refer to relevant legislation, approved codes of practice and guidance available from the Health & Safety Executive (website: http://www.hse.gov.uk) and to the IP Codes of Practice available from the Energy Institute (website: http://www.energyinst.org.uk)

Further information:

The above information is based on our current knowledge of the product. The purpose of this data sheet is to describe the product in terms of its safety and environmental requirements. It is the user's responsibility to satisfy themselves as to the application of this information and/or recommendations for their own use.