

SAFETY DATA SHEET

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

1.1. Product identifier	
Name of the substance	Residual Fuel Oils - All Grades (Refer to Synonyms for Product Name)
Identification number	649-024-00-9 (Index number)
Registration number	01-2119474894-22-0031
Synonyms	No.6 Fuel Oil * Bunker Fuel Oil 180 - 380 cst.
SDS number	2003
1.2. Relevant identified uses of	the substance or mixture and uses advised against
Identified uses	Distribution, formulation and repackaging of substances, used as fuel, manufacturing.
Uses advised against	All other uses.
1.3. Details of the supplier of th	ne safety data sheet
Supplier	
Company name	Valero Energy (Ireland) Ltd
	1st Floor, Block B
Address	D22 X0Y3, Quarryvale
	Ireland
Telephone	01/210 345 4593 (General information; US)
e-mail	CorpHSE@valero.com
Contact person	Industrial Hygienist
1.4. Emergency telephone	0044/(0)18 65 407333

number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

	Acute toxicity, inhalation	Category 4	H332 - Harmful if inhaled.
	Carcinogenicity	Category 1B	H350 - May cause cancer.
	Reproductive toxicity	Category 2	H361 - Suspected of damaging fertility or the unborn child.
	Specific target organ toxicity - repeated exposure	Category 2 (blood, thymus, liver)	H373 - May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure.
	Aspiration hazard	Category 1	H304 - May be fatal if swallowed and enters airways.
En	vironmental hazards		
	Hazardous to the aquatic environment, acute aquatic hazard	Category 1	H400 - Very toxic to aquatic life.
	Hazardous to the aquatic environment, long-term aquatic hazard	Category 1	H410 - Very toxic to aquatic life with long lasting effects.
2.2. Lat	bel elements		

Label according to Regulation (EC) No. 1272/2008 as amended Contains:

Fuel oil, residual

Hazard pictograms



Signal word	Danger
Hazard statements	
H304 H332 H350 H361 H373 H410	May be fatal if swallowed and enters airways. Harmful if inhaled. May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	
P201 P260 P273 P280	Obtain special instructions before use. Do not breathe mist/vapours. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
Response	
P301 + P310 P331	IF SWALLOWED: Immediately call a POISON CENTRE/doctor. Do NOT induce vomiting.
Storage	Not assigned.
Disposal	Not assigned.
Supplemental information on the label	EUH066 - Repeated exposure may cause skin dryness or cracking.
2.3. Other hazards	This substance does not meet vPvB / PBT criteria of Regulation (EC) No 1907/2006, Annex XIII. The substance is not included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties. The substance is not considered to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Hydrogen sulphide (H2S) can accumulate in the headspace of storage tanks and reach potentially hazardous concentrations.

SECTION 3: Composition/information on ingredients

3.1. Substances	
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General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Fuel oil, residual	100	68476-33-5 270-675-6	01-2119474894-22-0031	649-024-00-9	
Classification: Acute Tox. 4;H332;(ATE: 11 mg/l), Carc. 1B;H350, Repr. 2;H361, STOT RE 2;H373, Asp. Tox. 1;H304, Aquatic Acute 1;H400, Aquatic Chronic 1;H410					

List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Union workplace exposure limit(s).

Composition comments

The full text for all H-statements is displayed in section 16. All concentrations are in percent by weight unless ingredient is a gas.

Hydrogen sulphide (H2S) can accumulate in the headspace of storage tanks and reach potentially hazardous concentrations.

SECTION 4: First aid measures

General information	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.
4.1. Description of first aid meas	ures
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a poison centre or doctor/physician if you feel unwell.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

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

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

Aspiration may cause pulmonary oedema and pneumonitis. Direct contact with eyes may cause temporary irritation. Jaundice. Prolonged exposure may cause chronic effects.

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards	Combustible liquid.
5.1. Extinguishing media	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
5.2. Special hazards arising from the substance or mixture	The product is combustible, and heating may generate vapours which may form explosive vapour/air mixtures. During fire, gases hazardous to health may be formed.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Special fire fighting procedures	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Do not breathe mist/vapours. Do not touch or walk through spilled material. Wear appropriate personal protective equipment.
For emergency responders	Keep unnecessary personnel away. Ensure adequate ventilation. Avoid inhalation of vapours and spray mists. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.
6.2. Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
6.3. Methods and material for containment and cleaning up	The product is immiscible with water and will spread on the water surface. Prevent entry into waterways, sewer, basements or confined areas.
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.
	Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. Put material in suitable, covered, labelled containers.
6.4. Reference to other sections	For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Before entering storage tanks and commencing any operation in a confined area check the atmosphere for oxygen content and flammability. (Subject to applicability) If sulphur compounds are suspected to be present in the product, check the atmosphere for H2S content. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Do not breathe mist/vapours. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see section 10 of the SDS).			
	Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended			
	ANNEX 1, PART 1 Categories of dangerous substances Hazard categories in accordance with Regulation (EC) No 1272/2008 - E1 Hazardous to the Aquatic Environment Acute (Lower-tier requirements = 100 tonnes; Upper-tier requirements = 200 tonnes) - E1 Hazardous to the Aquatic Environment Chronic (Lower-tier requirements = 100 tonnes; Upper-tier requirements = 200 tonnes)			
7.3. Specific end use(s)	Use as a fuel.	Observe industrial sector ge	uidance on best practices	3.
SECTION 8: Exposure con	trols/persor	nal protection		
8.1. Control parameters				
Occupational exposure limits	No exposure l	imits noted for ingredient(s).		
Biological limit values	No biological e	exposure limits noted for the	ingredient(s).	
Recommended monitoring procedures	Follow standa	rd monitoring procedures.		
Derived no effect levels (DNELs))			
General population				
Product		Value	Assessment factor	Notes
Fuel oil, residual (CAS 68476-			10	
Long-term, Systemic, Ora	1	0.015 mg/kg bw/day	40	
<u>Workers</u> Product		Value	Assessment factor	Notes
Fuel oil, residual (CAS 68476-	-33-5)	Value	Assessment lactor	Notes
Long-term, Systemic, Der		0.065 mg/kg bw/day	36	
Long-term, Systemic, Inha		0.18 mg/m3	22.5	
Short-term, Systemic, Inh		4716.8 mg/m3	7.5	
Predicted no effect concentratio	ns (PNECS)			
Product		Value	Assessment factor	Notes
Product Fuel oil. residual (CAS 68476-	.33-5)	Value	Assessment factor	Notes
Product Fuel oil, residual (CAS 68476- Secondary poisoning	-33-5)	Value 66.7 mg/kg	Assessment factor	Notes
Fuel oil, residual (CAS 68476-	33-5)		Assessment factor	Notes
Fuel oil, residual (CAS 68476- Secondary poisoning	Good general applicable, uso maintain airbo	66.7 mg/kg ventilation should be used. e process enclosures, local	Ventilation rates should b exhaust ventilation, or ot ded exposure limits. If ex	be matched to conditions. If
Fuel oil, residual (CAS 68476- Secondary poisoning 8.2. Exposure controls Appropriate engineering controls Individual protection measures,	Good general applicable, us maintain airbo established, m such as person	66.7 mg/kg ventilation should be used. e process enclosures, local orne levels below recommen naintain airborne levels to ar nal protective equipment	Ventilation rates should be exhaust ventilation, or othe ded exposure limits. If ex acceptable level.	be matched to conditions. If her engineering controls to posure limits have not been
Fuel oil, residual (CAS 68476- Secondary poisoning 8.2. Exposure controls Appropriate engineering controls	Good general applicable, us maintain airbo established, m such as personal	66.7 mg/kg ventilation should be used. e process enclosures, local orne levels below recommen naintain airborne levels to ar nal protective equipment	Ventilation rates should b exhaust ventilation, or ot ded exposure limits. If ex acceptable level. uired. Personal protectio	be matched to conditions. If her engineering controls to posure limits have not been n equipment should be chosen
Fuel oil, residual (CAS 68476- Secondary poisoning 8.2. Exposure controls Appropriate engineering controls Individual protection measures,	Good general applicable, us maintain airbo established, m such as personal Use personal according to th equipment.	66.7 mg/kg ventilation should be used. e process enclosures, local orne levels below recommen haintain airborne levels to ar nal protective equipment protective equipment as req he CEN standards and in dis	Ventilation rates should be exhaust ventilation, or othe ded exposure limits. If ex acceptable level. uired. Personal protection scussion with the supplied	be matched to conditions. If her engineering controls to posure limits have not been n equipment should be chosen
Fuel oil, residual (CAS 68476- Secondary poisoning 8.2. Exposure controls Appropriate engineering controls Individual protection measures, General information	Good general applicable, us maintain airbo established, m such as personal Use personal according to th equipment.	66.7 mg/kg ventilation should be used. e process enclosures, local orne levels below recommen haintain airborne levels to ar nal protective equipment protective equipment as req he CEN standards and in dis	Ventilation rates should be exhaust ventilation, or othe ded exposure limits. If ex acceptable level. uired. Personal protection scussion with the supplied	be matched to conditions. If her engineering controls to posure limits have not been n equipment should be chosen r of the personal protective
Fuel oil, residual (CAS 68476- Secondary poisoning 8.2. Exposure controls Appropriate engineering controls Individual protection measures, General information Eye/face protection	Good general applicable, us maintain airbo established, m such as personal according to th equipment. Wear safety g Wear suitable thickness: 0.2	66.7 mg/kg ventilation should be used. e process enclosures, local orne levels below recommen haintain airborne levels to ar nal protective equipment protective equipment as req he CEN standards and in dis lasses with side shields (or g gloves tested to EN374. In 25 mm. Breakthrough time:	Ventilation rates should be exhaust ventilation, or othe ded exposure limits. If ex acceptable level. uired. Personal protection soussion with the supplier goggles). Eye protection full contact: Glove materi >480 min. Splash contac	be matched to conditions. If her engineering controls to posure limits have not been n equipment should be chosen r of the personal protective should meet standard EN 166.
Fuel oil, residual (CAS 68476- Secondary poisoning 8.2. Exposure controls Appropriate engineering controls Individual protection measures, General information Eye/face protection Skin protection	Good general applicable, us maintain airbo established, m such as personal according to th equipment. Wear safety g Wear suitable thickness: 0.2 Layer thickness	66.7 mg/kg ventilation should be used. e process enclosures, local orne levels below recommen haintain airborne levels to ar nal protective equipment protective equipment as req he CEN standards and in dis lasses with side shields (or e gloves tested to EN374. In	Ventilation rates should be exhaust ventilation, or othe ded exposure limits. If ex acceptable level. uired. Personal protection scussion with the supplier goggles). Eye protection full contact: Glove materi >480 min. Splash contactime: 10-30 min.	be matched to conditions. If her engineering controls to sposure limits have not been n equipment should be chosen r of the personal protective should meet standard EN 166. al: Nitrile rubber. Layer t: Glove material: Neoprene;
Fuel oil, residual (CAS 68476- Secondary poisoning 8.2. Exposure controls Appropriate engineering controls Individual protection measures, General information Eye/face protection Skin protection - Hand protection	Good general applicable, us maintain airbo established, m such as personal according to th equipment. Wear safety g Wear suitable thickness: 0.2: Layer thicknes Wear suitable In case of inac	66.7 mg/kg ventilation should be used. e process enclosures, local orne levels below recommen naintain airborne levels to ar nal protective equipment protective equipment as req he CEN standards and in dis lasses with side shields (or g gloves tested to EN374. In 25 mm. Breakthrough time: ss: 0.75 mm; Breakthrough t protective clothing. Use of a	Ventilation rates should be exhaust ventilation, or othe ded exposure limits. If ex a acceptable level. uired. Personal protection scussion with the supplier goggles). Eye protection full contact: Glove materi >480 min. Splash contactime: 10-30 min. an impervious apron is re inhalation of oil mist, sui	be matched to conditions. If her engineering controls to sposure limits have not been n equipment should be chosen r of the personal protective should meet standard EN 166. al: Nitrile rubber. Layer t: Glove material: Neoprene;
Fuel oil, residual (CAS 68476- Secondary poisoning 8.2. Exposure controls Appropriate engineering controls Individual protection measures, General information Eye/face protection Skin protection - Hand protection - Other	Good general applicable, us maintain airbo established, m such as person Use personal according to th equipment. Wear safety g Wear suitable thickness: 0.2 Layer thickness Wear suitable In case of inac combination fi	66.7 mg/kg ventilation should be used. e process enclosures, local orne levels below recommen naintain airborne levels to ar nal protective equipment protective equipment as req he CEN standards and in dis lasses with side shields (or g gloves tested to EN374. In 25 mm. Breakthrough time: ss: 0.75 mm; Breakthrough t protective clothing. Use of a dequate ventilation or risk of	Ventilation rates should be exhaust ventilation, or othe ded exposure limits. If ex a acceptable level. uired. Personal protection scussion with the supplier goggles). Eye protection full contact: Glove materi >480 min. Splash contactime: 10-30 min. an impervious apron is re inhalation of oil mist, suited.	be matched to conditions. If her engineering controls to posure limits have not been n equipment should be chosen r of the personal protective should meet standard EN 166. al: Nitrile rubber. Layer t: Glove material: Neoprene; commended.
Fuel oil, residual (CAS 68476- Secondary poisoning 8.2. Exposure controls Appropriate engineering controls Individual protection measures, General information Eye/face protection Skin protection - Hand protection - Other Respiratory protection	Good general applicable, us maintain airbo established, m such as personal according to th equipment. Wear safety g Wear suitable thickness: 0.2 Layer thicknes Wear suitable In case of inac combination fi Wear appropri Observe any r personal hygie	66.7 mg/kg ventilation should be used. e process enclosures, local orne levels below recommen naintain airborne levels to ar nal protective equipment protective equipment as req he CEN standards and in dis lasses with side shields (or g gloves tested to EN374. In 25 mm. Breakthrough time: ss: 0.75 mm; Breakthrough time: ss: 0.75 mm; Breakthrough time: dequate ventilation or risk of lter (type A2/P2) can be use iate thermal protective clothi medical surveillance requirer ene measures, such as was or smoking. Routinely wash	Ventilation rates should be exhaust ventilation, or othe ded exposure limits. If ex- n acceptable level. uired. Personal protection scussion with the supplier goggles). Eye protection full contact: Glove materi >480 min. Splash contaction ime: 10-30 min. an impervious apron is re- inhalation of oil mist, suited. ing, when necessary. ments. When using do no- hing after handling the material	be matched to conditions. If ther engineering controls to sposure limits have not been n equipment should be chosen r of the personal protective should meet standard EN 166. al: Nitrile rubber. Layer t: Glove material: Neoprene; commended. table respiratory equipment with of smoke. Always observe good aterial and before eating,

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties				
Physical state	Liquid.			
Form	Liquid.			
Colour	Black.			
Odour	Petroleum.			
Melting point/freezing point	Not determined.			
Boiling point or initial boiling point and boiling range	> 160 - < 600 °C (> 320 - < 1112 °F)			
Flammability	Combustible.			
Upper/lower flammability or exp	losive limits			
Explosive limit - lower (%)	Not determined.			
Explosive limit – upper (%)	Not determined.			
Flash point	62 °C (143.6 °F) Pensky-Martens Closed Cup			
Auto-ignition temperature	263 °C (505.4 °F)			
Decomposition temperature	Not determined.			
рН	Not determined.			
Kinematic viscosity	>= 3.6 - < 396 mm2/s (100 °C (212 °F))			
Solubility				
Solubility (water)	Insoluble in water.			
Partition coefficient (n-octanol/water) (log value)	Not applicable.			
Vapour pressure	< 0.04 psi estimated			
Density and/or relative density				
Density	> 840 - < 1100 kg/m³ (15 °C)			
Vapour density	> 1 estimated			
Particle characteristics	Not applicable.			
9.2. Other information				
9.2.1. Information with regard to physical hazard classes	No relevant additional information available.			
9.2.2. Other safety characteristic	S			
Viscosity	> 10 - < 55 mm²/s (100°C)			
SECTION 10: Stability and	-			
10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.			
10.2. Chemical stability	Material is stable under normal conditions.			
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.			
10.4. Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.			
10.5. Incompatible materials	Strong oxidising agents.			
10.6. Hazardous decomposition products	No hazardous decomposition products are known.			
SECTION 11: Toxicologica	al information			
General information	Occupational exposure to the substance or mixture may cause adverse effects.			
Information on likely routes of e Inhalation	xposure Harmful if inhaled.			
Skin contact	Repeated exposure may cause skin dryness or cracking.			
	Direct contact with eyes may cause temporary irritation.			
Eye contact	שווכט טטחומטו שונוו בעבש וומע טמעשל ופוויףטומוץ וווומנוטוו.			

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

cause chronic effects.

Acute toxicity	Harmful if inhaled.		
Product	Species	Test Results	
Fuel oil, residual (CAS 68476-33-	5)		
Acute			
Dermal			
LD50	Rabbit	> 2000 mg/kg, 24 Hours	
Inhalation			
Aerosol LC50	Rat	4100 mg/m2 4 Hours	
	Rai	4100 mg/m3, 4 Hours	
Oral LD50	Female Rat	4320 mg/kg	
Skin corrosion/irritation	Repeated exposure may cause skin dryness or		
Serious eye damage/eye irritation	Based on available data, the classification criter	ria are not met.	
Respiratory sensitisation	Based on available data, the classification criter	ria are not met.	
Skin sensitisation	Based on available data, the classification criter	ria are not met.	
Germ cell mutagenicity	Based on available data, the classification criteria are not met.		
Carcinogenicity	May cause cancer.		
Reproductive toxicity	Suspected of damaging fertility or the unborn child.		
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.		
Specific target organ toxicity - repeated exposure	May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure.		
Aspiration hazard	May be fatal if swallowed and enters airways.		
Mixture versus substance information	No information available.		
11.2. Information on other hazar	ds		
Endocrine disrupting properties	This substance does not have endocrine disrupting properties with respect to human health, as it does not meet the assessment criteria laid out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605.		
Other information			

SECTION 12: Ecological information

12.1. Toxicity	Very toxic to aquatic life with long lasting effects.			
Product		Species	Test Results	
Fuel oil, residual (CAS 68476-33-	-5)			
Aquatic				
Acute				
Algae	EL50	Algae	0.32 mg/l, 72 Hours	
Crustacea	EL50	Daphnia	0.22 mg/l, 48 Hours	
Fish	LL50	Fish	79 mg/l, 96 Hours	
12.2. Persistence and degradability	Expected to	Expected to be inherently biodegradable.		
12.3. Bioaccumulative potentia	I The produc	The product is not bioaccumulating.		
Partition coefficient n-octanol/water (log Kow)	Not availab	Not available.		
Bioconcentration factor (BCF)	Not availab	Not available.		
12.4. Mobility in soil	The produc	The product is insoluble in water. Expected to have low mobility in soil.		
12.5. Results of PBT and vPvB assessment	This substa	This substance does not meet vPvB / PBT criteria of Regulation (EC) No 1907/2006, Annex XIII.		
12.6. Endocrine disrupting properties	it does not	This substance does not have endocrine disrupting properties with respect to the environment, as it does not meet the assessment criteria laid out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605.		

SECTION 13: Disposal considerations

13.1. Waste treatment methods		
Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).	
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.	
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.	
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.	
Special precautions	Dispose in accordance with all applicable regulations.	
SECTION 14: Transport information		

ADR 14.1. UN number UN3082 14.2. UN proper shipping ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fuel oil, residual) name 14.3. Transport hazard class(es) 9 Class Subsidiary risk -9 Label(s) Hazard No. (ADR) 90 **Tunnel restriction code** -Ш 14.4. Packing group 14.5. Environmental hazards Yes 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user RID 14.1. UN number UN3082 14.2. UN proper shipping ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fuel oil, residual) name 14.3. Transport hazard class(es) 9 Class Subsidiary risk -9 Label(s) 14.4. Packing group Ш 14.5. Environmental hazards Yes 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user ADN UN3082 14.1. UN number ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fuel oil, residual) 14.2. UN proper shipping name 14.3. Transport hazard class(es) 9 Class Subsidiary risk -9 Label(s) Ш 14.4. Packing group 14.5. Environmental hazards Yes 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user IATA 14.1. UN number UN3082 Environmentally hazardous substance, liquid, n.o.s. (Fuel oil, residual) 14.2. UN proper shipping name 14.3. Transport hazard class(es) Class 9 Subsidiary risk Ш 14.4. Packing group

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14.5. Environmental hazards		
ERG Code	9L Read actaty instructions, SDS and amorganay presedures before handling	
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.	
IMDG		
14.1. UN number 14.2. UN proper shipping	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fuel oil, residual)	
name 14.3. Transport hazard class		
Class	9	
Subsidiary risk	-	
14.4. Packing group 14.5. Environmental hazards		
Marine pollutant	Yes	
EmS 14.6. Special precautions for user	F-A, S-F Read safety instructions, SDS and emergency procedures before handling.	
Yes 14.7. Maritime transport in bulk according to IMO instruments	Not established.	
General information	IMDG Regulated Marine Pollutant.	
SECTION 15: Regulatory information		
•	nental regulations/legislation specific for the substance or mixture	
EU regulations		
Not listed.	09 on substances that deplete the ozone layer, Annex I and II, as amended	
	n persistent organic pollutants (recast), as amended	
	2 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended	
Not listed. Regulation (EU) No. 649/2011	2 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended	
Not listed.	2 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended	
	2 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended	
Regulation (EU) No. 649/2012 Not listed.	2 concerning the export and import of dangerous chemicals, Annex V as amended	
	6 Annex II Pollutant Release and Transfer Registry, as amended	
Not listed. Regulation (EC) No. 1907/200 Not listed.	06, REACH Article 59(10) Candidate List as currently published by ECHA	
Authorisations		
Regulation (EC) No. 1907/200 Not listed.	06, REACH Annex XIV Substances subject to authorization, as amended	
Restrictions on use		
Regulation (EC) No. 1907/20	06, REACH Annex XVII Substances subject to restriction on marketing and use as amended	
work, as amended.	protection of workers from the risks related to exposure to carcinogens and mutagens at	
Fuel oil, residual (CAS 684		
Other EU regulations	Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended	
	ANNEX 1, PART 1 Categories of dangerous substances Hazard categories in accordance with Regulation (EC) No 1272/2008 - E1 Hazardous to the Aquatic Environment Acute - E1 Hazardous to the Aquatic Environment Chronic	
-	or accident hazards involving dangerous substances, as amended	
Not listed. Other regulations	The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.	

National regulations	According to Directive 92/85/EEC as amended, pregnant women should not work with the product, if there is the least risk of exposure.
	Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended. Follow national regulation on the protection of workers from the risks of exposure to carcinogens and mutagens at work, in accordance with Directive 2004/37/EC, as amended.
15.2. Chemical safety assessment	Chemical Safety Assessment has been carried out.
SECTION 16: Other inform	nation
List of abbreviations	
	 ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways. ADR: Agreement concerning the International Carriage of Dangerous Goods by Road. CAS: Chemical Abstract Service. CEN: European Committee for Standardization.
	 IATA: International Air Transport Association. IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk. IMDG: International Maritime Dangerous Goods. MARPOL: International Convention for the Prevention of Pollution from Ships.
	PBT: Persistent, bioaccumulative and toxic. RID: Regulations concerning the International Carriage of Dangerous Goods by Rail. STEL: Short term exposure limit. TWA: Time Weighted Average. vPvB: Very persistent and very bioaccumulative.
References	Chemical safety report. CONCAWE ECHA: European Chemical Agency.
Information on evaluation method leading to the classification of mixture	Not applicable.
Full text of any statements, which are not written out in full	
under sections 2 to 15	 H304 May be fatal if swallowed and enters airways. H332 Harmful if inhaled. H350 May cause cancer. H361 Suspected of damaging fertility or the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects.
Training information	Follow training instructions when handling this material.
Disclaimer	The information in this Safety Data Sheet (SDS) was obtained from sources believed to be reliable and accurate, and is not represented as being absolutely complete. The end user of this product has the responsibility for evaluating the adequacy of the data for the intended application and conditions of use; for determining the safety, toxicity, regulatory requirements, and suitability of the product under these conditions; and for obtaining additional or clarifying data where uncertainty exists. The data serves as general guidance only, and is to be used in combination with professional judgement of persons experienced in a specific application, use or process; and additional data may be required.

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