

1. Identification Of The Substance / Preparation And Of The Company / Undertaking

REACH Product name	Fuel oil, residual
Chemical family	Hydrocarbons Mixture
CAS nº.	68476-33-5
EINECS	270-675-6
Physical state	Liquid
Use of the substance / preparation	BUNKER FUEL
Uses	None identified
Address	BENCOM - Armazenagem e Comércio de Combustíveis, SA Largo Vasco Bensaude, 13 9500 - 103 Ponta Delgada, Açores - PORTUGAL
Operational Address	Parque de São Miguel R. Eng.º Abel Ferin Coutinho 9500-191 Ponta Delgada, São Miguel, Açores - PORTUGAL
Telephone nº.	Telephone office: 00351296304770 Telephone operational site: 00351296201710; Fax: 00351296201719 Clients Information: 00351296201710
Emergency telephone nº.	00351296201710

2. Hazards Identification

The product is classified as dangerous according to Directive 67/548/EEC and its amendments.

Classification	Carc. Cat. 2; R45
Human health hazards	May cause cancer.

3. Composition / Information On Ingredients

The liquid product from various refinery streams, usually residues. The composition is complex and varies with the source of the crude oil. Sulphur max. 1,5 % in weight.

Substance / preparation Mono-constituent substance

Ingredient name	CAS number	%	EC number	Classification
Fuel oil, residual	68476-33-5	100	270-675-6	Carc. Cat. 2; [1] R45

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

Occupational exposure limits, if available, are listed in section 8.

4. First Aid Measures

Inhalation

Get medical attention immediately. Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriated mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion

Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous.

Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

Get medical attention immediately. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

5. Fire-Fighting Measures**Extinguishing media****Suitable**

Use foam, dry chemical or carbon dioxide.

Not suitable

Do not use a direct water jet.

Special protective

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Fire-fighters measures

Seal off leaks, where such an operation does not involve any hazard. If fire cannot be extinguished, allow it to die out in a controlled manner. Use water to cool down equipment and items exposed to fire.

Hazardous thermal decomposition products

Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide and dioxide, hydrocarbons, soot and aldehydes.

Special exposure hazard

In a fire or if heated, a pressure increase will occur and the container may burst. Promptly isolate the scene by taken involving any personal risk or without suitable training.

6. Accidental Release Measures**Personal precautions**

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

7. Handling And Storage**Storage**

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Use original container.

Store and use away from heat, sparks, open flame or any other ignition source.

8. Exposure Controls / Personal Protection

Remarks The oil mist must be lower than 5 mg/m³.

Ingredient name	Occupational exposure limits
Fuel oil, residual	No exposure limit value known.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessary to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Respiratory protection Self-contained breathing apparatus for high concentrations.

Hand protection Wear suitable gloves

Eye protection Safety glasses. Pursuant to EN-166:01 standard.

Skin protection Use clothing that is impervious and resistant to hydrocarbons. Pursuant to EN-340:93 standard.
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical And Chemical Properties

General information

Appearance

Physical state	Liquid.
Color	Black.
Odor	Characteristic.
Flash point	Open cup: > 65°C (> 149°F)
Relative density	< 0,991
Solubility	Insoluble in the following materials: cold water and hot water
Viscosity	Kinematic: 3,8 cm ² /s (380 cSt)

10. Stability And Reactivity

Stability	The product is stable.
Conditions and materials to avoid	Open flames, sparks and static discharge. STRONG OXIDIZER.
Hazardous decomposition products	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide and dioxide, hydrocarbons, soot and aldehydes.
Hazardous polymerization	Under normal conditions of storage and use, hazardous polymerization will not occur.

11. Toxicological Information

Toxicokinetics

Distribution	Not available.
---------------------	----------------

Metabolism Not available.
Elimination Not available.

Potencial acute health effects

Inhalation No known significant effects or critical hazardous.
Ingestion No known significant effects or critical hazardous.
Skin contact No known significant effects or critical hazardous.
Eye contact No known significant effects or critical hazardous.

Acute toxicity

Conclusion / Summary Not available.

Potential chronic health effects**Chronic toxicity**

Conclusion / Summary Not available.

Irritation / Corrosion

Conclusion / Summary Not available.

Sensitizer

Conclusion / Summary Not available.

Carcinogenicity

Conclusion / Summary Not available.

Mutagenicity

Conclusion / Summary Not available.

Teratogenicity

Conclusion / Summary Not available.

Reproductive toxicity

Conclusion / Summary Not available.

Product name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
Fuel oil, residual	Carc. Cat. 2; R45	---	---	---

Product name	List name	Name on list	Classification	Notes
Fuel oil, residual	Spain Occupational Exposure Limits for Chemical Agents	Petróleo combustível, residual (fuelóleo pesado)	Carc. C2	---

Chronic effects No known significant effects or critical hazardous.

Carcinogenicity May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity No known significant effects or critical hazardous.

Teratogenicity No known significant effects or critical hazardous.

Developmental effects No known significant effects or critical hazardous.

Fertility effects No known significant effects or critical hazardous.

Over-exposure signs / symptoms

Inhalation No specific data.

Ingestion No specific data.

Skin No specific data.

Eyes No specific data.

12. Ecological Information

Environmental effects No known significant effects or critical hazardous.

Aquatic ecotoxicity

Conclusion / Summary Not available.

Biodegradability

Conclusion / Summary Not available.

Other adverse effects No known significant effects or critical hazardous.

PBT Not available.

vPvB Not available.

Other ecological information Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (CONCAWE recommendation).

13. Disposal Considerations

Methods of disposal The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste The classification of the product may meet the criteria for a hazardous waste.

14. Transport Information

International transport regulations

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
ADR / RID Class	UN 1268	PETROLEUM PRODUCTS, N.O.S.	3	III		<u>Hazard identification number</u> 30 <u>Limit quantity</u> LQ7 <u>CEFIC Tremcard</u> 30S1268
ADNR Class	UN 1268	PETROLEUM PRODUCTS, N.O.S.	3	III		---
IMDG Class	UN 1268	PETROLEUM PRODUCTS, N.O.S.	3	III		<u>Emergency schedules (EmS)</u> F-E, S-E
IATA Class	UN 1268	PETROLEUM PRODUCTS, N.O.S.	3	III		<u>Passenger and Cargo Aircraft</u> Quantity limitation: 60 Packaging instructions: 309 <u>Cargo Aircraft Only</u> Quantity limitation: 220 Packaging instructions: 310 <u>Limited Quantities – Passenger Aircraft</u> Quantity limitation: 10 Packaging instructions: Y309

PG* : Packing group

Remarks:

15. Regulatory Information**EU regulations****Hazard symbol or symbols**

Toxic

Risk phrases

R45 – May cause cancer.

Safety phrases

S53 – Avoid exposure – obtain special instructions before use.
S45 – In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Contains

Fuel oil, residual 270-675-6

Product use

Industrial applications.

Europe inventory

This material is listed or exempted.

Black List Chemicals

Not listed.

Priority List Chemicals

Not listed.

Other EU regulations**Restrictions on the
Marketing and Use
Directive**

Restricted to professional users.

European Union

In accordance to EU Directive 91/155/EEC, as amended by 2001/58/EC.
Regulation EC No 1907/2006.

16. Other Informations**Full text of R-phrases
referred to in sections 2 and**

3 - Spain

R45 – May cause cancer.

**Full text of classifications
referred to in sections 2 and****3 - Spain**

Carc. Cat. 2 – Carcinogen Category 2

History**Date of previous issue**

No previous validation

Health & SafetyPonta Delgada
Telephone: 00351296201710
Fax: 00351296201719
e-mail: Bencom@Bensaude.pt

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.