



SAFETY DATA SHEET

This Safety Data Sheet has been prepared in compliance with Annex II of "The Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals" published in the Official Gazette (RG) No. 30105 on 23.06.2017.

Product Name: Fuel Oil
First Publish Date: November 2004
Revision Date: 03/17/2023
Revision No: 06

Form No: OPET.GBF.05

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1. Identification of the Substance or Preparation

Product Name : Fuel Oil
Product Code : OPET – 610, OPET – 620
CAS No. : 68476-33-5
EC No. : 289-220-8
Other Names of the Product : HIGH SULPHUR FUEL OIL (OPET-610), LOW SULPHUR FUEL OIL (OPET – 620)

1.2. Use of the Substance/Preparation

This product is mainly composed of hydrocarbons containing C15 to C50 carbon atoms. It is commonly used as a thermal energy source in boilers and industrial applications. Fuel oils classified according to the differences in physical and chemical properties specified in the TS EN 2177 Standard and Section 9 of this document are introduced to the market under different company codes.

1.3. Company/Undertaking Identification

Company Name : OPET PETROLCÜLÜK A.Ş.
Address : Barbaros Mah. Gelincik Sokak No.4/A
34746, ATAŞEHİR / İSTANBUL
Phone : 0216 522 90 00
Fax : 0216 522 91 82
E-mail : info@opet.com.tr
SDS Authorized Personnel : burak.yontar@opet.com.tr

1.4. Emergency Telephone

National Poison Information Center: 114
Emergency Telephone : +90216 522 9000 (8:00-17:00, GMT+3, Monday-Friday)

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

2.1.1 Hazards Identification

Acute Tox. 4	H332	<u>Harmful if inhaled.</u>
Carc. 1B	H350	<u>May cause cancer.</u>
Repr. 2	H361d	<u>Suspected of damaging fertility or the unborn child.</u>
STOT RE 2	H373	<u>May cause damage to organs through prolonged</u>

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Aquatic Acute 1	H400	<u>or repeated exposure.</u>
Aquatic Chronic 1	H410	<u>Very toxic to aquatic life.</u>
		<u>Very toxic to aquatic life with long lasting effects.</u>
	EUH066	<u>Repeated exposure may cause skin dryness or cracking</u>

2.2 Label Elements

Hazard Pictograms:



GHS08



GHS07



GHS09

Signal Word: Danger

CLP Hazard Statements:

H332 : Harmful if inhaled.

H350 : May cause cancer.

H361d: Suspected of damaging fertility or the unborn child.

H373 : May cause damage to organs through prolonged or repeated exposure.

H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long lasting effects.

CLP Precautionary Statements:

Prevention

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P243: Take action to prevent static discharges.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash ... thoroughly after handling.

P270: Do not eat, drink or smoke when using this product..

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

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P280: Wear protective gloves/protective clothing/eye protection/face protection/ hearing protection/...

Response

P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P330: Rinse mouth.

P331: Do NOT induce vomiting.

P302+P352: IF ON SKIN: Wash with plenty of water/...

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312: Call a POISON CENTRE/doctor/... if you feel unwell.

P308+P313: IF exposed or concerned: Get medical advice/attention.

P361+P364: Take off immediately all contaminated clothing and wash it before reuse.

P391: Collect spillage.

Storage

P405: Store locked up.

Disposal

P501: Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regulations.

2.3 Other Hazards

This product can contain hydrogen sulphide (H₂S), a very toxic and extremely flammable gas.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance

Not classified.

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3.2 Mixtures

Components	EC Number	CAS Number	Quantity (%wt)	Risk Components
Fuel oil, residual; Heavy Fuel oil; [The liquid product from various refinery streams, usually residues. The composition is complex and varies with the source of the crude oil.]	270-675-6	68476-33-5	%100	Acute Tox. 4 : H332 Carc. 1B: H350 Repr. 2: H361d STOT RE 2: H373 Aquatic Acute 1 : H400 Aquatic Chronic 1: H410 EUH066

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

EYE:

In case of eye contact, rinse eyes with copious amounts of water for approximately 15 minutes, keeping them open during rinsing. Check for contact lenses and remove them if present. If the product is hot, rinse with plenty of cold water. If there is pain, burning, or redness in the eyes, seek medical attention immediately.

SKIN:

Remove contaminated clothing and wash the skin thoroughly with water and soap for approximately 15 minutes. Do not use any solvents for cleaning. If the hot product comes into contact with the skin, wash the area with copious amounts of cold water for at least 10 minutes, or longer if the pain persists. If redness, swelling, or pain occurs, seek medical attention immediately.

INHALATION:

If exposure to vapour, steam, or fumes causes dizziness, headache, blurred vision, or irritation of the eyes, nose, or throat, move the exposed person to fresh air immediately. Product vapours may cause chemical pneumonia, a serious and potentially lethal inflammation of the lungs, so vapours should not

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be inhaled. Unconscious patients should be placed in the recovery position. Monitor for cardiac arrhythmia and follow breathing closely. If artificial respiration and cardiac massage are required, ensure that authorised health personnel respond. Seek medical attention immediately.

It's recommended to provide training on intervention and first aid techniques to individuals working in areas and operations where Hydrogen Sulphide (H₂S) is likely present.

INGESTION:

If ingested, spit out immediately and rinse the mouth with plenty of water. **Do not induce vomiting. Seek medical attention immediately.** If vomiting occurs, ensure the airway remains open and that the substance does not enter the trachea.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

INHALATION:

Exposure to vapor, steam, or fume may lead to dizziness, headache, blurred vision or irritation in eyes, nose or throat.

If exposed to H₂S gas, move the affected person to fresh air immediately and seek medical attention without delay. If the person loses consciousness, someone with first aid training should administer artificial respiration, perform chest compressions, and provide oxygen if necessary. Seek medical attention immediately. There is no evidence of H₂S accumulating in the body after exposure.

SKIN CONTACT:

Signs of skin irritation may include a burning sensation, redness, swelling, and pain.

INGESTION:

Swallowing may lead to damage in lungs.

EYE CONTACT:

Contact may cause eye irritation.

4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

There is no specific antidote or therapeutic practice. It should be treated according to the symptoms.

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5. FIREFIGHTING MEASURES

5.1 Extinguishing Media

Dry chemical powder, foam, water mist, and carbon dioxide type fire extinguishers can be used for small fires. In the case of large fires, inform the fire brigade immediately. Always ensure there is an escape route in case of fire. Foam should be used to extinguish such fires. Position yourself with the wind at your back during intervention to avoid inhaling combustion and evaporation gases that are harmful to human health.

Entrance and exit routes should be kept clear to allow for the transportation of emergency vehicles and for withdrawal in case of danger. Unauthorised personnel should be kept away from the site.

5.2 Special Hazards Arising from The Substance or Mixture

The product may contain flammable vapours even at temperatures below its flash point. Toxic gases are formed as a result of combustion. If vapour is ignited by sparks or a hot surface, there is a risk of flash fire, and it may form an explosive mixture with air. Its vapour is heavier than air, spreads along the ground, and may ignite from a distance. In the presence of static electricity, ignition of flammable air-vapour mixtures can occur.

It may re-ignite on water as it spreads across the water's surface.

5.3 Advice for Firefighters

Personal Protective Equipment Required

Proper thermal protection equipment, fire protection suits, protective masks, and Self-Contained Breathing Apparatus should be used. Surrounding tanks and personnel should be protected with water spray.

Respiratory equipment masks should be used by trained personnel. Indoor operations should be performed by teamwork.

Unsuitable Extinguishers and Response Methods

Do not use direct water jets on burning product since it will spread the fire.

Hazardous Products of Fire

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Carbon oxides, sulphur oxides, and nitrogen oxides are formed via combustion. In case of incomplete combustion, carbon monoxide exposure will increase. Product vapours arising due to heat may burn at high temperatures.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Use personal protective equipment specified in Chapter 8.

6.2 Environmental Precautions

Use appropriate containment to avoid environmental contamination. Use sand, earth or other suitable barriers to prevent the spread or entry into the drainage system, ditches or rivers. Try to disperse product vapor. For example, try to redirect the vapor flow to a safe location by using mist sprays. Remove all potential sources of ignition from the surrounding area.

Take precautions against static electricity discharge.

When the product mixes with water, spreading of product on water surface should be prevented via a suitable barrier and product should be collected from water surface by appropriate absorbents. The product remains on the surface of the water and may cause the death of aquatic organisms by preventing oxygen transfer.

In case of being unable to control a significant amount of leakage, the local authorities should be informed about the situation. If a possibility of exposure of people or the environment emerges, relevant authorities should be notified immediately. In case of spillage/leakage, call the relevant authorities and T.C. Ministry of Environment Urbanization and Climate Change Line (Hotline 181).

6.3 Methods and Material for Containment and Cleaning Up

Spillage of product possesses a very high risk of fire and/or explosion. Therefore, the ignition sources should be removed from the surrounding area immediately. Spilled product should be soaked up via soil, sand, sawdust, or any suitable absorbent substances as soon as possible.

Be careful that the spilled product may cause a slippery ground. Remove all non-essential personnel from the spill area. Electrical devices should not be used. Take precautionary measures against static electric and ensure electrical continuity by grounding all electrical equipment.

In case of a spill, experts on the subject should be contacted, and the spilled product should be collected by authorized personnel. Contaminated soil, sawdust and other substances should be

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disposed of in compliance with legal regulations. In case of spilling into sea, approved diluting agents may be used upon permission from local official authorities.

In case of large and widespread spills, respond with specialist personnel and cover spilled liquid by foam in order to eliminate the risk of flashing and prevent the spilled liquid to contact with air. In case of indoors spillage, the environment should be ventilated, and it should be checked whether there is sufficient air inside for safe entry. Oxygen mask and protective clothes should be used if required. Since the product vapor is heavier than air, it may reach to closed channels such as drainage channels and basements, so that presence of flashing sources may cause risk of explosion and flashing.

Fuel oil can be liquid, semi-solid, or solid depending on its temperature. Since hydrogen sulphide gas may be released from hot liquid spilled in a closed area, intervention should be carried out by trained personnel using an oxygen mask.

6.4 Reference to Other Sections

See Sections 8, 11 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Pay attention to personal hygiene and prevent skin contact with the product. In case of contact, VITON® or NITRILE rubber gloves should be used. The contaminated clothes should be disposed of unpacked. During filling and using the product, position yourself with the wind at your back. Contact with eyes and skin should be avoided. Safety goggles or face mask should be used for protection against splashes.

No food or drink should be consumed, and smoking should be prohibited in areas where product is carried, stored or used.

Ensure that the working area is well ventilated. Static electricity may accumulate while handling; therefore, precautionary measures against electrostatic discharge must be taken. No filling operation should be performed without grounding. The materials and equipment used should be non-sparking.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

It is stable under normal usage and storage conditions. Under normal storage temperatures, a little amount of hydrocarbon vapor and H₂S gas, which is highly toxic and flammable may form. These vapours may pose a risk of explosion/flashing even at temperatures below the normal flashing point of

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the product. The product may ignite very easily. When the product is in a hot ambient or in contact with a hot surface, or in case of leakage, there is a risk of ignition, flash or explosion. At the same time, since light hydrocarbons accumulate at the top of the storage tanks, posing a risk of ignition. Therefore, distribution and storage operations should be performed far from heat and ignition sources, and static electricity should be discharged. The equipment to be used should be grounded, and the transfer containers must be bonded together with a cable. Necessary measures should be taken to ensure electrical continuity when transferring between containers. Grounding should be done with the transfer cable. The area should be well ventilated. Warning labels should not be removed since some residue may be present in empty tanks. Precautions should be taken against ignition sources during filling and emptying.

Clothes, paper, and all kinds of absorbent materials contaminated by the product should be disposed of safely.

Storage containers and handling tools should comply with this product. The product can be stored in tanks made of carbon steel. The containers should be marked properly and kept closed when they are not in use. The containers and their surroundings should have warning labels. Appropriate safety precautions against fire should be taken for large storage tanks. No cutting, drilling or welding operations should be performed on storage tanks before necessary safety precautions are taken against combustible fuels.

Take all precautionary measures for accidental mixing of product into soil or water.

In case of emergency during entrance operations into tanks, a sufficient number of personnel with safety equipment should be present, and the situation should be responded promptly. If the hydrocarbon vapor concentration is greater than 1% and the oxygen content is less than 20%, as measured before entering the tank, do not enter the tank without an oxygen mask.

Packaging: Suitable material should be used against static electricity. Containers and container coatings should be made of materials which consist of a low carbon rate and stainless steel. Epoxy and zinc silicate dyes should be used for storage painting.

Unsuitable materials: Should be avoided from long-term contact with natural, butyl and nitrate rubbers.

7.3 Specific End Use(s)

Please refer to Section 1.2.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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8.1. Control Parameters

Component Name	Duration	Limit	Unit	Regulations
Fuel Oil, Residue	TWA (8 hour)	10	ppm	ACGIH
	STEL (15 min)	15	ppm	ACGIH
Hydrogen Sulphide (H ₂ S)	TWA (8 hour)	5	ppm	KMÇSGÖHY
	STEL (15 min)	10	ppm	KMÇSGÖHY

No specific limit value has been established for this product. Vapor, steam or fume should be controlled in the lowest level as possible.

8.2. Exposure Controls

8.2.1. General Information

Keep the concentration of product in the environment under the permissible limits by providing general and local exhaust ventilation.

8.2.2. Personal Protective Equipment



Protection of Respiratory System:

Approved suitable protective gas mask should be used if work conducted under product vapor. The producer instructions should be followed while using gas masks. The filter of gas mask used should conform to the maximum contamination concentration which may be generated.

Protection of Skin and Hands

In case of contact with skin, the protective clothes (excluding PVC and natural rubber) including impermeable gloves (VITON or NITRILE rubber gloves) should be used. Anti-static protective clothing and shoes should be used for effective protection against static electricity. In case of ignition risk, self-fire-resistant clothing and gloves should be worn. Regular control and maintenance of protective gloves, shoes, and clothes should be performed.

Protection of Eye and Face

Protective equipment (safety goggles and face mask) should be used against chemical splashes.

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Considering the operation to be performed, equipment for exposure controls should be chosen according to the standards mentioned below.

Clothing: TS EN 1149-3 (For antistatic property)

Raincoat: TS EN 1149-3

Shoes: TS EN ISO 20345, TS EN 13287

(Rubber) Boots: EN ISO 20345 200 JUL S5

Gloves: TS 5560 EN 166, TS EN 170, TS EN 374-3, 1149-5

Safety goggles: TS 5560 EN 166, TS EN 170

Protective gas mask: EN 149:2001+A1:2009 (Another standards may apply while choosing appropriate masks considering the operation to be performed)

Closed-circuit breathing apparatus: EN 144-1,2,3 EN 145 (To be used for entering open or closed environments which contain harmful product vapours and/or do not contain sufficient amount of oxygen)

Moreover, all the equipment for exposure controls should be chosen according to the suitability to CE Standard, if applicable.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

PROPERTY	TEST METHOD	UNIT	VALUE
Appearance	Visual		Siyah, Opak, Half liquid at room temperature
Odor			Hydrocarbon smell
Odor threshold			No data
pH			No data
Melting Point - Freezing Point			No data
Initial Boiling Point - Boiling Range			No data
Evaporation rate			No data
Flammability			No data

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Upper/lower flammability or explosive limits			No data
Vapor Pressure (RVP)			No data
Vapor Density (Air = 1)			No data
Density @ 15°C	TS 1013 EN ISO 3675 TS EN ISO 12185	kg/m ³	998 (max.)
Solubility			No data
Partition coefficient: n-octanol/water			No data
Decomposition temperature			No data
Sulphur – OPET – 610	TS EN ISO 8754	% a.g.	3,5 (max.)
Sulphur – OPET – 620			1,0 (max.)
Kinematic Viscosity (100°C'de) – OPET – 610	TS 1451 EN ISO 3104	cSt	50 (max.)
Kinematic Viscosity (100°C'de) – OPET – 620			40 (max.)
Flash Point – OPET – 610	TS EN 2719	°C	66 (min.)
Flash Point – OPET – 620			66 (min)
Auto Ignition Temperature		°C	Above 220
Ash – OPET – 610	TS EN ISO 6245	% (a.g.)	0,2 (max)
Ash – OPET – 620			0,2 (max)

9.2 Other Information

Not available.

10. STABILITY AND REACTIVITY

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10.1 Reactivity

No hazardous reaction is expected when handled and stored according to provisions. It oxidizes in the air.

10.2 Chemical Stability

It is stable under normal usage and storage conditions, and hazardous reactions do not occur.

10.3 Possibility of Hazardous Reactions

Vapours of the product may form explosive mixtures with air.

10.4 Conditions to Avoid

Product should be kept away from extreme temperature, ignition sources, and systems that may generate hydrocarbon vapor. Product containing containers should not be pressurized, welded, soldered, cut, punctured, bored or sandpapered.

10.5 Incompatible Materials

Contact with oxidizers (strong acids, peroxides, chlorine etc.) should be avoided.

10.6 Hazardous Degradation / Decomposition Products

In the event of combustion, carbon oxides (CO, CO₂), water vapor (H₂O), sulphur dioxide (SO₂), and unidentified organic and inorganic components form.

Overheating during storage may result in the formation of toxic hydrogen sulphide (H₂S) gas due to partial decomposition and evaporation. Since the odour of hydrogen sulphide (rotten egg smell) cannot be detected at high concentrations, it should be measured with specially designed gas detection equipment.

Inhalation of fuel oil dust and ashes is dangerous. All areas where fuel oil dust and ashes may be present should be dampened with water before starting work.

11. TOXICOLOGICAL INFORMATION

Exposure usually occurs via inhalation, skin and eye contact but there are situations in which absorption from skin or accidental swallowing encountered.

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Contact with hot product can cause burns to the eyes and skin.

Acute Toxicity:

Acute toxicity - Oral : LD50 > 5.000 mg/kg (rat)
Acute toxicity - Dermal : LD50 > 2.000 mg/kg (rabbit)
Acute toxicity - Inhalation : LC50 > 1-5 mg/l /4 hours (rat)

The acute toxicity of the product is low but may cause irritation with frequent contact. The product exhibits more systemic and developmental toxic effects with repeated exposure. Toxicity increases with the concentration and variety of polycyclic aromatic hydrocarbon (PAH) compounds in the product.

Skin corrosion / irritation: Burning, redness, and swelling may occur upon contact. Long-term and frequent contact may cause drying and cracking of the skin, irritate skin severely, cause inflammation (dermatitis) and irremediable diseases such as cancer.

Serious eye damage / irritation: In case of accidental contact with eyes, it may cause burn, redness, irritation, blurred vision, or transient blindness.

Respiratory irritation: Inhalation of vapor may cause an irritation in respiratory track. Hazardous by inhalation due to hydrogen sulphide and polycyclic aromatic hydrocarbons (PAHs).

Respiratory or skin sensitization: Not classified as a sensitizer.

Germ cell mutagenicity: Although positive results were obtained in in vitro studies, negative results were obtained in in vivo studies.

Carcinogenicity: It has caused cancer in laboratory animals. Some PAH compounds, known to be skin carcinogens, have led to tumour formation in animals exposed to products containing high levels of PAHs. The occurrence may vary depending on the specific types of PAH compounds present.

Reproductive and developmental toxicity: It has been shown to cause fetotoxicity at levels toxic to pregnancy and may harm the unborn child.

Specific target organ toxicity – single exposure: Not expected to be hazardous.

Specific target organ toxicity – repeated exposure: Prolonged and repeated exposure may cause damage to organs and/or organ systems (such as the liver, spleen, thymus, and bone marrow).

Aspiration hazard: It can damage the lungs by inhalation if swallowed and vomited.

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SAFETY DATA SHEET

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Product Name: Fuel Oil
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Additional Information: When swallowed, it may irritate mouth, throat, and digestion tract, and it may cause nausea and intestinal disorders.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

It causes a high toxic effect on aquatic organisms. It may cause long-term adverse effects in the environment.

Since it is lighter than water, it forms a film layer on water surface, and prevents aquatic creatures to receive oxygen from air and have them physically damaged.

Acute Toxicity:

Fuel oil, residue; LL 50, fish; 79 - 1000 mg/L (96 hours, *O.mykiss*)
LL 50, invertebrate; 0,22 - 1000 mg/L (48 hours, *D.magna*)
LL 50, algae; 0,32 - 107 mg/L (96 hours, *R.subcapitata*)

Chronic Toxicity:

Fish; expect to be NOEC/NOEL > 0.01 - <= 0.1 mg/L (according to the model data)
Invertebrate; expected to be NOEC/NOEL > 0.1 - <= 1 mg/L (according to the model data)

12.2 Persistence and Degradability

It is degradable in nature and easily decomposes in soil. It maintains its properties under anaerobic conditions. It oxidizes rapidly in the air.

12.3 Bioaccumulation potential

Contains constituents with the potential to bioaccumulate.

12.4 Mobility in Soil

If the product spilled, it will be absorbed by soil, and it may mix with underground waters.

12.5 Result of PBT and vPvB Assessments

Not classified as PBT or vPvB.

12.6 Other Adverse Effects

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Since it is lighter than water, it forms a film layer on water surface, and prevents aquatic creatures to receive oxygen from air and have them physically damaged.

13. DISPOSAL CONSIDERATIONS

Do not throw product waste near ponds, channels, and wells, or in soil. There may be product left in empty packages. The contaminated empty containers should be properly collected by licensed persons and recycled, disposed of by incineration or any other appropriate methods. "Regulation on Control of Waste" by Republic of Türkiye Ministry of Environment Urbanization and Climate Change should be followed up for disposal and recycling.

14. TRANSPORT INFORMATION

ADR/RID

Class : 9
UN No. : UN 3082
Packing Group : III
Shipment Name : UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
Environmental Damage : Yes

ADN

Class : 9
UN No. : UN 3082
Packing Group : III
Shipment Name : UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
Environmental Damage : Yes

IMDG

Class : 9
UN No. : UN 3082
Packing Group : III
Sea pollutant : Yes
Shipment Name : UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.

IATA/ICAO

Class : 9
UN No. : UN 3082

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Packing Group : III
Shipment Name : UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

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

No data.

15. REGULATORY INFORMATION

15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

This Safety Data Sheet has been prepared in compliance with Annex II of "The Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals" published in the Official Gazette (RG) No. 30105 on 23.06.2017.

15.2. Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this substance/preparation.

16. OTHER INFORMATION

The information on health, safety, and the environment in this document is obtained by reviewing resources other than OPET and is deemed valid as of this date. No guarantee is given with respect to the completeness and accuracy of the information contained in this document.

The health, safety, and environmental measures/recommendations included in this document may not be sufficient for all individuals and/or cases.

The user is responsible for assessing and safely utilizing the material and complying with applicable laws and regulations.

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Safety Data Sheet Prepared by;

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Burak Yontar

Certificate No: KDU-A-0-0174

Certificate Validity Period: 28.09.2022 - 28.09.2027

Contact: burak.yontar@opet.com.tr +90 216 522 90 00

OPET Petrolcülük A.Ş. – Head Office

Barbaros Mah. Gelincik Sokak No.4/A 34746, ATAŞEHİR / İSTANBUL

Acute Tox. 4: Acute toxicity (inhal.), Hazard Category 4

Carc. 1B: Carcinogenicity, Hazard Category 1B

Repr. 2: Reproductive toxicity, Hazard Category 2

STOT RE 2: Specific target organ toxicity — Repeated exposure, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment — Acute Hazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment — Chronic Hazard, Category 1

Hazard and Precautionary Statements:

Hazard Statements

H332 : Harmful if inhaled

H350 : May cause cancer

H361d: Suspected of damaging the unborn child.

H373 : May cause damage to organs through prolonged or repeated exposure

H400 : Very toxic to aquatic life

H410 : Very toxic to aquatic life with long lasting effects

EUH066 : Repeated exposure may cause skin dryness or cracking

Precautionary Statements:

Prevention

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P243: Take action to prevent static discharges.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash ... thoroughly after handling.

P270: Do not eat, drink or smoke when using this product..

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection/ hearing protection/...

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Response

P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P330: Rinse mouth.

P331: Do NOT induce vomiting.

P302+P352: IF ON SKIN: Wash with plenty of water/...

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312: Call a POISON CENTRE/doctor/... if you feel unwell.

P308+P313: IF exposed or concerned: Get medical advice/attention.

P361+P364: Take off immediately all contaminated clothing and wash it before reuse.

P391: Collect spillage.

Storage

P405: Store locked up.

Disposal

P501: Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regulations.

Abbreviations and Synonyms

ACGIH: American Conference of Industrial Hygienists.

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

ADR: Accord Dangereux Routier (European regulations concerning the international transport of dangerous goods by road)

CAS: Chemical Abstracts Service

GHS: Globally Harmonized System

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IBC: Intermediate Bulk Container

IMDG: International Maritime Dangerous Goods

UN: United Nations

PVC: Polyvinyl chloride

MARPOL 73/78: The International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 (MARPOL 73/78, MARPOL is short for marine pollution and 73/78 short for the years 1973 and 1978)

RID: The Regulation concerning the International Carriage of Dangerous Goods by Rail

TWA: time-weighted average (regarding permissible exposure limits of a chemical)

STEL: short-term exposure limits

OSHA: Occupational Safety and Health Administration.

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OEL: Occupational Exposure Limit

vPvB: very Persistent and very Bioaccumulative

PBT: Persistent, Bioaccumulative and Toxic

KMÇSGÖHY: Regulation on Health and Safety Measures in Working with Chemical Substances

Information on Revisions: Revised parts are indicated with underlining.

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