



Fuel Oil (Heating Oil)

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 3/16/2014 Revision date: 4/14/2018 Version: 3.0

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

1.1. Product identifier

Product name : Fuel Oil (Heating Oil)
Chemical name : Fuel oil, residual
CAS No : 68476-33-5
EC No : 270-675-6

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses : Used as fuel in boilers and furnaces in industry.
Uses advised against : No data available

1.3. Details of the supplier of the safety data sheet

TP Petrol Dağıtım A.Ş.
Bulgurlu Mahallesi Gürpınar Caddesi No:15/6 Üsküdar / İstanbul - Turkey
Tel: +90 216 481 90 00 - Faks: +90 216 481 99 00
www.tppd.com.tr - info@tppd.com.tr

1.4. Emergency telephone number

Emergency telephone number : +90 444 44 87

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (inhalation:vapour) Category 4	H332
Carcinogenicity, Category 1B	H350
Reproductive toxicity, Category 2	H361
Specific target organ toxicity - Repeated exposure, Category 2	H373
Hazardous to the aquatic environment - Acute Hazard, Category 1	H400
Hazardous to the aquatic environment - Chronic Hazard, Category 1	H410

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Harmful if inhaled. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

GHS08

GHS09

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H332 - Harmful if inhaled.
H350 - May cause cancer.
H361 - Suspected of damaging fertility or the unborn child.
H373 - May cause damage to organs (blood, thymus and liver) through prolonged or repeated exposure.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P201 - Obtain special instructions before use.
P260 - Do not breathe vapours.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P331 - Do not induce vomiting.

EUH-statements :

EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

This material can contain hydrogen sulphide (H₂S), a very toxic and extremely flammable gas. Vapours containing hydrogen sulphide may accumulate during storage or transport and may also be vented during filling of tanks. This product contains significant quantities of polycyclic aromatic hydrocarbons that are observed in experiments to cause skin cancer.

In case of contact with hot product can burn.



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SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%
Fuel oil, residual	(CAS-No.) 68476-33-5 (EC-No.) 270-675-6 (EC Index-No.) 649-024-00-9	100

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Do not induce vomiting. If vomiting occurs have person lean forward. If unconscious, place in the recovery position and seek medical advice. Never give anything by mouth to an unconscious person. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation	: Upper respiratory tract irritation, cough.
Symptoms/effects after skin contact	: May cause skin irritation, redness.
Symptoms/effects after eye contact	: Redness, itching, tears.
Symptoms/effects after ingestion	: May cause nausea and vomiting.

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

Treat symptomatically. Inhalation of H₂S is collapsed respiratory system. May cause coma and death. If pulmonary edema occurs, patients should be kept under observation for 48 hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Explosion hazard	: Vapours are heavier than air and may spread along floors. Vapours may form explosive mixture with air.
Hazardous decomposition products in case of fire;	: Toxic and corrosive vapours may be released. Carbon monoxide. Carbon dioxide. Hydrocarbons. Smoke. Sulphur oxides. Hydrogen sulfide.

5.3. Advice for firefighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Emergency procedures	: Avoid contact with the substance has been spilled or released. Comply with all relevant local and national regulations. Evacuate the area of all non-essential personnel. Provide adequate ventilation. Do not breathe vapour or mist. Shut off leaks, if possible without personal risk.
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6.2. Environmental precautions

Environmental precautions	: Use appropriate container to avoid environmental contamination. Prevent spreading or entering to drains, ditches or rivers using sand, earth or other appropriate barriers. Try to distribute gas or direct the flow to a safe location for example using fog sprays.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Eliminate all ignition sources. Stop leak if without risk. May be in liquid, semi solid and solid forms depending on its temperature. Large spills must remain in foam cover until danger is over. Use a non-combustible material such as vermiculite, sand or earth to absorb the product and place into a container for later disposal. Wash the area with soap and water. Spills and contaminated materials are collected from the work area as soon as possible and placed into a suitable container and ingredients are indicated on the container.
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Other information : Must be treated by trained personnel using oxygen mask due to H₂S can be spread from spilled hot liquid in closed area. Recollecting of the spilled product must be performed by specialist staff. To prevent spreading to water must be used barriers and recollected the product on water surface. Product is heavy and can be difficult to collect. Please contact with experts in case of spills. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe vapours.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Light hydrocarbons have flammability through they are collected at the top of the storage tank. Even at temperature lower than normal flashpoint, may create flammable / explosion hazard. (Flash Point, should not be seen as a safe zone about the possibility of igniting the vapors in the tank headspace.) Therefore it is necessary to discharge the static electricity. Measures should be taken against the ignition source while filling and discharge.
Equipments such as pumps etc. must be earthed or transmission cables must be connected each other by a cable to avoid accumulation of static electricity. There is flammable and explosion risk if the product contact with hot surfaces. The contaminated cloth, paper and other materials must be disposed of after use without accumulation. Despite the possibility of the empty tanks containing product vapor should not be done cutting, welding, soldering processes.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Fuel oil, residual (68476-33-5)		
USA - ACGIH	ACGIH TWA (mg/m ³)	0.2 mg/m ³
USA - ACGIH	ACGIH TWA (ppm)	10 ppm
USA - ACGIH	ACGIH STEL (ppm)	15 ppm
Hydrogen sulfide (7783-06-4)		
EU	IOELV TWA (mg/m ³)	7 mg/m ³
EU	IOELV TWA (ppm)	5 ppm
EU	IOELV STEL (mg/m ³)	14 mg/m ³
EU	IOELV STEL (ppm)	10 ppm
EU	Regulatory reference	COMMISSION DIRECTIVE 2009/161/EU

8.2. Exposure controls

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Users are advised to consider national Occupational Exposure Limits or other equivalent values. Ensure good ventilation of the work station.

Hand protection:

Chemically resistant protective gloves. Nitrile rubber gloves. Breakthrough time : > 480 min. Glove thickness : > 0,35 mm. Standard EN 374 - Protective gloves against chemicals. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

Eye protection:

Safety glasses with side shields. Safety goggles recommended during refilling. Standard EN 166 - Personal eye-protection.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:



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Recommended: Filter AB(P3). In case of inadequate ventilation wear respiratory protection. Standard EN 14387 - Gas filter(s), combined filter(s) and full face mask - EN 136. [In case of inadequate ventilation] wear respiratory protection.

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Black.
Odour	: Characteristics.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 56 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: < 0.01 kPa (20 °C)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.98 kg/l (15 °C)
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: < 10 cSt (100 °C)
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

If storage tank heats up, H₂S gas increases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Inhalation:vapour: Harmful if inhaled.

Fuel oil, residual (68476-33-5)	
LD50 oral rat	4320 - 5270 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	4100 mg/m ³



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Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: May cause damage to organs (blood, thymus and liver) through prolonged or repeated exposure.
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity	: Very toxic to aquatic life.
Chronic aquatic toxicity	: Very toxic to aquatic life with long lasting effects.

Fuel oil, residual (68476-33-5)	
LC50 fish	79 mg/l - 96h (Oncorhynchus mykiss)
EC50 daphnia	0.22 mg/l - 48h (Daphnia magna)
EC50 algae	0.32 mg/l - 72h (Pseudokirchneriella subcapitata)

12.2. Persistence and degradability

Fuel oil, residual (68476-33-5)	
Persistence and degradability	Expected to be biodegradable.

12.3. Bioaccumulative potential

Fuel oil, residual (68476-33-5)	
Bioaccumulative potential	Not expected to be bioaccumulative.

12.4. Mobility in soil

Fuel oil, residual (68476-33-5)	
Ecology - soil	Insoluble in water.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Dispose in a safe manner in accordance with local/national regulations.
Waste treatment methods	: Recycle the material as far as possible. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations. Disposal through controlled incineration or authorised waste dump.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
European List of Waste (LoW) code	: 13 07 01* - fuel oil and diesel

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
3082	3082	3082	3082	3082
14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fuel oil, residual)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fuel oil, residual)	Environmentally hazardous substance, liquid, n.o.s. (Fuel oil, residual)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fuel oil, residual)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fuel oil, residual)
Transport document description				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fuel oil, residual), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fuel oil, residual), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Fuel oil, residual), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fuel oil, residual), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fuel oil, residual), 9, III



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ADR	IMDG	IATA	ADN	RID
14.3. Transport hazard class(es)				
9	9	9	9	9
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes

14.6. Special precautions for user

- Overland transport

Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	:
	:
Tunnel restriction code (ADR)	: -
EAC code	: •3Z

- Transport by sea

Special provisions (IMDG)	: 274, 335, 969
Packing instructions (IMDG)	: P001, LP01
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP2, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A

- Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L



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CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provisions (IATA)	: A97, A158, A197
ERG code (IATA)	: 9L

- Inland waterway transport

Classification code (ADN)	: M6
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0

- Rail transport

Classification code (RID)	: M6
Special provisions (RID)	: 274, 335, 375, 601
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Special packing provisions (RID)	: PP1
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1, TP29
Tank codes for RID tanks (RID)	: LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 90

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

Reference to AwSV	: Water hazard class (WGK) 3, severe hazard to waters (Classification according to AwSV; ID No. 443)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen	: Fuel oil, residual is listed
SZW-lijst van mutagene stoffen	: Fuel oil, residual is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: The substance is not listed

Denmark

Danish National Regulations	: Young people below the age of 18 years are not allowed to use the product
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Pregnant/breastfeeding women working with the product must not be in direct contact with the product

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

No data available

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
EC50	Median effective concentration
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) 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
Carc. 1B	Carcinogenicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
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.
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.

Disclaimer of Liability

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