



SAFETY DATA SHEET BIODIESEL

This Safety Data Sheet is in accordance with Regulation (EC) No 1907/2006 (REACH).
Commission Regulation (EU) 2020/878 of 18 June 2020.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name **BIODIESEL**

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

Identified uses It used as fuel for vehicles with diesel motor.
Uses advised against Do not use as aircraft fuel, cleaning agents and solvents.

1.3. Details of the supplier of the safety data sheet

Supplier **Akpet Akaryakıt Dağıtım A.Ş.**
Akatlar Mahallesi, Ebululla Mardin Caddesi
No: 22 Maya Park Tower I, 34335
Beşiktaş / İstanbul / Turkey
Tel: +90 212 376 66 00
www.lukoil.com.tr
e-mail: info@lukoil.com.tr

Contact Person HSE Manager

1.4. Emergency telephone number

LUKOIL: +90 444 45 85 (7/24)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC No. 1272/2008 and SI 2019 No. 720)

Physical and Chemical Hazards Flam. Liq. 3 - H226
Human health Hazards Skin Irrit. 2 - H315; Asp. Tox. 1 - H304; Acute Tox. 4 - H332; Carc. 2 - H351;
STOT RE 2 - H373
Environment Hazards Aquatic Chronic 2 - H411

The Full Text for all hazard statements are displayed in section 16.

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008



Signal Word **Danger**

Content **Fuel, diesel**

Hazard Statements

H226 Flammable liquid and vapour
H304 May be fatal if swallowed and enters airways.



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H315	Causes skin irritation.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with national regulations.

2.3. Other hazards

Inhalation of high vapor concentrations may cause drowsiness, dizziness, headache, nausea and loss of coordination. In case of prolonged inhalation may occur unconsciousness. Prolonged or repeated contact with skin may cause redness, itching, irritation, eczema/cracking and oily acnes. Components of the product may be absorbed through the skin into the body. May cause damage to the liver. Suspected cancer risk. Flowing droplets of the product if inhaled when descending into the stomach or vomiting pass into the lungs can cause serious chemical lung inflammation.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

3.2. Mixtures

Name	EC No.	CAS No.	Content	Classification (EC 1272/2008)
Fuel, diesel	269-822-7	68334-30-5	95-99%	Flam. Liq. 3 - H226 Asp. Tox. 1 - H304 Skin Irrit. 2 - H315 Acute Tox. 4 - H332 Carc. 2 - H351 STOT RE 2 - H373 Aquatic Chronic 2 - H411

The Full Text for all hazard statements are displayed in section 16.

Composition Comments

The data shown are in accordance with the latest EC Directives.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Get medical attention if any discomfort continues.



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Inhalation

Move into fresh air and keep at rest. Rinse nose and mouth with water. If necessary, should be applied artificial respiration and heart massage. If there should be given oxygen. Get medical attention if any discomfort continues.

Ingestion

Immediately rinse mouth. Keep person under observation. Do not induce vomiting.
If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions.

Skin contact

Immediately remove contaminated clothing. Wash off promptly and flush contaminated skin with water.
Promptly remove clothing if soaked through and flush skin with water.
Large quantities: Remove contaminated clothing. Flush skin thoroughly with water. Get medical attention if any discomfort continues.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing.
Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention promptly if symptoms occur after washing.

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

Inhalation : Upper respiratory irritation, cough.
Ingestion : Nausea, vomiting, diarrhea.
Skin contact : May cause redness and irritation.
Eye contact : Eye irritation, redness, lacrimation.

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

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use: Foam. Carbon dioxide (CO₂). Dry chemicals, sand, earth, water mist.

Unsuitable extinguishing media DO NOT use water jet.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

Vapours may form explosive mixtures with air.

Vapor is heavier than air so that it can leaking to sewer system and may reach to further ignition sources.

Specific hazards

Result of thermal decomposition may occur fume, carbon oxides and organic compounds with low molecular weight compounds which are not yet considered. Sulfur oxides (SO_x). Nitrogen oxides (NO_x).

5.3. Advice for firefighters

Special Fire Fighting Procedures

Dike and collect extinguishing water.

Keep away all non-emergency personnel from fire area.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Fires in enclosed places should be extinguished by trained personnel wearing protective clothing and an oxygen mask.

Protective equipment for fire-fighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.



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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

Do not smoke, use open fire or other sources of ignition (cigarette, portable electrical devices such as battery-operated flashlight, radio, mobile phone). Immediately shut the devices in the environment which can cause sparkles.

Provide adequate ventilation. In case of spills, beware of slippery floors and surfaces.

Immediately ventilate the area by opening doors and windows when diesel leak is defined in the enclosed environment. Shut off the diesel flow by closing diesel cylinders, hood or valves. Continue ventilation until the diesel smell is removed in the environment.

Keep away from all objects that can cause ignition and sparkles when diesel leak is defined in the open environment. Disable all motor vehicle from entering leak area. Try to shut off the diesel flow with a suitable valve. Evacuate the area.

Leak may be prevented from spreading by spraying water with fog nozzle and shielding according to the direction of the wind.

6.2. Environmental precautions

Prevent spreading over wide areas (e.g. enclosing). Do not contaminate water.

In case of spilled to sewer or water environment informed the local authorities.

6.3. Methods and material for containment and cleaning up

Absorb spilled product such as vermiculite, sand or (without absorbing water) suitable non-combustible, absorbing materials and place 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.

6.4. Reference to other sections

For personal protection, see section 8.

See section 11 for additional information on health hazards.

For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid contact with eyes and skin. Use appropriate goggles and gloves. Keep away from heat, sparks and open flame.

During application and drying, solvent vapours will be emitted. Do not eat, drink or smoke when using the product.

If it is suspected of sulphur compounds found in product, check the atmosphere for the amount of H₂S.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place.

Keep away from food, drink and animal feeding stuffs. Protect against physical damage and/or friction.

Protect from heat, sparks and flame. Keep in a cool, well ventilated area.

Store away from incompatible materials.

It should be stored in tanks designing according to the product.

Storage tanks should be labeled and should be kept closed when out of use.

Do not remove the warning signs since some products may be present in empty tanks.

Despite the possibility of the empty tanks containing product vapor should not be done cutting, welding, soldering processes.

If the concentration of hydrocarbon vapor is more than 1%, oxygen concentration is less than 20% in the tank should not be entered without oxygen mask.

There is possibility of ignition vapour of product are collected in the storage tanks. Therefore, static electricity must be discharged.

Measures should be taken against the igniton 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.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs	STEL - 15 Min	Notes
Fuel, diesel	OEL		5 mg/m ³	

OEL = Occupational Exposure Limit.

DNEL Values - Diesel fuels

Workers, long-term, systemic effects, Inhalation	68.34 mg/m ³
Workers, short-term, systemic effects, Inhalation	4288 mg/m ³
Workers, long-term, systemic effects, Dermal	2.91 mg/kg
General population, long-term, systemic effects, Inhalation	20.22 mg/m ³
General population, short-term, systemic effects, Inhalation	2572.8 mg/m ³
General population, long-term, systemic effects, Dermal	1.25 mg/kg bw/day
General population, long-term, systemic effects, Oral	1.25 mg/kg bw/day

8.2. Exposure controls

Protective equipment



Process conditions

Göz yıkama yeri, güvenlik duşu sağlayın.

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment

Appropriate respiratory equipment should be used when the possibility of exposure to hydrocarbon vapor. Masks in accordance with EN138, EN141 standard.

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. Gloves in accordance with EN374. Nitrile, neoprene gloves are recommended. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection

Wear approved safety goggles. Goggles in accordance with EN166 standard.

Hygiene measures

Promptly remove non-impervious clothing that becomes contaminated. When using do not eat, drink or smoke. Wash hands after contact. Wash promptly if skin becomes contaminated.

Skin protection

Protective clothing should be worn. Anti-static and flame-retardant protective clothing is recommended to wear.

Environmental Exposure Controls

Please act in accordance with local and national laws.



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Identifier	Unit	Value	Test method
Appearance		Liquid	
Colour		Yellow	
Odour		Characteristic.	
Odour threshold		No information available.	
pH value		No information available.	
Initial boiling point and range		No information available.	
Evaporation rate		No information available.	
Upper/lower flammability		No information available.	
Flammability (solid,gas)		No information available.	
Density, 15 °C	kg/m ³	820 – 845	TS 1013 EN ISO 3675 TS EN ISO 12185
Flash Point	°C	>55	TS EN ISO 2719
Auto-ignition temperature	°C	≥225	
Melting point / freezing point	°C	-40 - 6	
Kinematic Viscosity (@40°C)	cSt	2,0-4,5	TS 1451 EN ISO 3104
Sulfur	% weight	Max.0,001	TS EN ISO 20846
Polycyclic Aromatic Hydrocarbons	% weight	Max.8	TS EN 12916
Vapor pressure		No information available.	
Vapor density		No information available.	
Relative density		No information available.	
Specific gravity		No information available.	
Solubility		No information available.	
Coefficient of dispersion: n-octanol/water		No information available.	
Decomposition temperature		No information available.	
Oxidizing properties		No information available.	
Explosive properties		No information available.	
Particle characteristics		Not applicable.	

9.2. Other information

No information required.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Will not polymerise.



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10.4. Conditions to avoid

Should be kept away from sources of ignition.

10.5. Incompatible materials

Avoid contact with strong reducing agent (oxidizing).

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

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

Acute Toxicity

Harmful if inhaled.

Diesel fuels

LD50, oral, rat	5000 mg/kg
LC50, inhalation, rat	4100 mg/m ³
LD50, dermal, rat	4300 mg/kg

Skin corrosivity/irritation

Causes skin irritation.

Serious eye damage / irritation

Based on available data the classification criteria are not met.

Skin and respiratory sensitivity

Based on available data the classification criteria are not met.

Can cause skin disorders like eczema (dermatitis). When exposed to sunlight, a photo-sensitivity can be developed as evidenced by the persistent repetition of a dermatic rash.

Germ cell mutagenicity:

Genotoxicity - In Vitro/ In Vivo

Based on available data the classification criteria are not met.

Test data is credible but not sufficient for the classification.

Carcinogenicity:

Suspected of causing cancer.

Reproductive Toxicity – Fertility/ Development

Based on available data the classification criteria are not met.

Test data is credible but not sufficient for the classification.

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 through prolonged or repeated exposure.

Aspiration hazard

May be fatal if swallowed and enters airways.

Inhalation

In high concentrations, vapours may irritate throat and respiratory system and cause coughing.



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Ingestion

It is harmful if swallowed in small doses. If swallowed a greater amount causes nausea and diarrhea. If exceed to lungs damages during vomiting

Skin contact

Prolonged or repeated contact with skin may cause redness, itching, irritation, eczema/cracking and oily acnes.
May cause damage to the liver.

Eye contact

May cause temporary eye irritation. Visual disturbances including blurred vision.
In case of accidentally eye contact causes temporary blindness.

11.2 Information on other hazards

This product does not contain any known or suspected endocrine disruptors.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Spillages prevent the transfer of oxygen by forming a film layer on the water surface.

	Fuel, diesel (CAS: 68334-30-5)	
LC 50, 96 Hrs, Fish	54 mg/l	Joordanella floridae
EC 50, 48 Hrs, Daphnia	3.4 mg/l	Palaemonetes pugio
IC 50, 72 Hrs, Algae	20 mg/l	Fucus endatatus

12.2. Persistence and degradability

This product is soluble in the soil without harming the environment.
Volatile components in the product have the photochemical ozone formation potential.

12.3. Bioaccumulative potential

There is no evidence that accumulating in the soil.
Made with the identified hydrocarbon assessment shows that any structure does not meet the criteria of very bioaccumulation (vB), however some of meet the criteria of bioaccumulation (B). Low potential to bioaccumulate.

12.4. Mobility in soil

Product is insoluble in water. Product spreads on water when certain components collapsed on the water system.
Volatile components of the product will be dispersed into the atmosphere.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Endocrine disrupting properties

The product does not contain any endocrine disrupting substance.

12.7. Other adverse effects

Very toxic to aquatic life with long lasting effects. Spills of petroleum products is generally dangerous for the environment.
Volatile components in the product have the photochemical ozone formation potential.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Disposed of as hazardous waste. Waste must be treated as the product itself.



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13.1. Waste treatment methods

Empty containers, dispose of waste and residues in accordance with legislation of the local authority.

Environmental manager must be informed of all major spillages.

Make sure containers are empty before discarding. Empty containers must not be burned because of explosion hazard.

Please recycle empty pack in accordance with legislation of the local authority. Do not re-use empty containers.

Some products may remain in empty containers. Do not perform heat treatment without erased or removed danger signs or labels from empty containers.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number or ID number

UN No. (ADR/RID/ADN) 1202

UN No. (IMDG) 1202

UN No. (ICAO) 1202

14.2. UN proper shipping name

Proper Shipping Name DIESEL FUEL

14.3. Transport hazard class(es)

ADR/RID/ADN Class 3

ADR/RID/ADN Class Class 3: Flammable liquids.

ADR Label No. 3

IMDG Class 3

ICAO Class/Division 3

Transport Labels



14.4. Packing group

ADR/RID/ADN Packing group III

IMDG Packing group III

ICAO Packing group III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant



14.6. Special precautions for user

EMS F-E, S-E

ADR transport category 3

Emergency Action Code 3Y

Hazard No. (ADR) 30

Tunnel restriction code (D/E)

Limited quantities 5 L

14.7. Maritime transport in bulk according to IMO instruments

No data available.



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SECTION 15: REGULATORY INFORMATION

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

- Commission Regulation (EU) 2020/878 of 18 June 2020.
- Health and Safety at Work etc. Act 1974 (as amended).
- EH40/2005 Workplace exposure limits.
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Seveso Directive

P5c Low Tier: 5000 tonnes Upper Tier: 50000 tonnes
E2 Low Tier: 200 tonnes Upper Tier: 500 tonnes

Restrictions (Annex XVII Regulation 1907/2006)

No specific restrictions on use are known for this product.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Abbreviations used in safety data sheet

ADR: European Agreement on International Carriage of Dangerous Goods by Road.
ADN: European Agreement on the International Carriage of Dangerous Goods by Inland Waterways.
RID: European Agreement on International Carriage of Dangerous Goods by Rail.
IATA: International Air Transport Association.
ICAO-TI: Technical Specification for Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
TWA: Time weighted average
ATE: Estimated value of acute toxicity
EC No: European Community number
CAS: Chemical Theory Service.
LD50: Substance that causes 50% (half) death in the test animals group (Median Fatal Dose).
LC50: Substance concentration causing 50% (half) death in the test animals group.
EC50: Effective Concentration of the substance causing the maximum of 50%.
PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Permanent, Very Biofriendly.
SEA: Classification, labeling, packaging regulation
DNEL: Derivative Inactive Level
PNEC: Estimated Unaffected Concentration
BHOT: Specific Target Organ Toxicity

Information Sources

This SDS is written based on the information received from rawmaterial supplier.
European Chemicals Agency (ECHA)

Revision Comments

Revised under current regulations.



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Classification procedures

Flam. Liq. 3 - H226 : Based on the test data.
Asp. Tox. 1 - H304 : Calculation method.
Skin Irrit. 2 - H315 : Calculation method.
Acute Tox. 4 - H332 : Calculation method.
Carc. 2 - H351 : Calculation method.
STOT RE 2 - H373 : Calculation method.
Aquatic Chronic 2 - H411 : Calculation method.

Hazard Statements In Full

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H304 May be fatal if swallowed and enters airways.
H332 Harmful if inhaled.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

Issued By

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Issued Note

This SDS is prepared based on the information and documents received from product owner. CRAD or/and SDS author shall not be responsible for incorrect prepared of SDS and pecuniary loss or intangible damages because of deficient or wrong information and documents which comes from product owner.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.