Diesel Fuel

Safety Data Sheet

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Section 1: Identification

1.1. Product identifier

Product form : Mixture

Product Identifier(s) : Diesel Fuel
Heating Oil
Low Sulfur Diesel
Ultra-low Sulfur Diesel
High Sulfur Diesel
Diesel
Fuel Oil #2
Furnace Oil #2
No. 2 Diesel Fuel
Hydrotreated Diesel Fuel
ULSD
Export Diesel
UULSD
Colonial Grade 67
Distillates (petroleum), hydrodesulfurized middle

Other means of identification : A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C11 through C25 and boiling in the range of approximately 205°C to 400°C (401°F to 752°F).

CAS-No. : 64742-80-9

1.2. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Fuel

1.3. Details of the supplier of the safety data sheet

Total Petrochemicals & Refining USA, Inc.
P O Box 674411
Houston, TX 77267-4411

For non-emergency product information:
Phone: 713-483-5000
Email: product.stewardship@total.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (Toll Free USA & Canada) / 703-527-3887 (Multiple languages)
Total Petrochemicals & Refining USA, Inc.: 1-800-322-3462 (Language: English only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable liquids Category 3

Acute toxicity (inhalation:dust,mist) Category 4

Skin corrosion/irritation Category 2

Carcinogenicity Category 2

Specific target organ toxicity (single exposure) Category 3 - Narcotic effects

Specific target organ toxicity (single exposure) Category 3 - Respiratory irritation

Specific target organ toxicity (repeated exposure) Category 2

Aspiration hazard Category 1

Hazardous to the aquatic environment - Chronic Hazard Category 2

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :

Signal word (GHS-US) : **Danger**

Hazard statements (GHS-US) : **Flammable liquid and vapour**
May be fatal if swallowed and enters airways
Causes skin irritation
Harmful if inhaled
May cause respiratory irritation
May cause drowsiness or dizziness
Suspected of causing cancer
May cause damage to organs (bone marrow, liver, thymus) through prolonged or repeated exposure
Toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) : Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, hot surfaces, open flames, sparks. - No smoking.
Keep container tightly closed.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical, lighting, ventilating equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe mist, spray, vapors.
Wash hands, forearms and face thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Wear eye protection, impermeable protective gloves, flame retardant protective clothing.
Specific treatment (see Section 4.1 of SDS or information on this label).
If swallowed: Immediately call doctor, poison center.
Do NOT induce vomiting.
If on skin: Wash with plenty of water.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation occurs: Get medical advice/attention.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If exposed or concerned: Get medical advice/attention.
Get medical advice/attention if you feel unwell.
Take off contaminated clothing and wash it before reuse.
In case of fire: Use water spray or fog, foam, dry chemical, carbon dioxide (CO2) to extinguish.
Collect spillage.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3. Hazards not otherwise classified

Other hazards not contributing to the classification : Product can accumulate electrostatic charges that may cause fire by electrical discharges.

2.4. Unknown acute toxicity (GHS US)

Not applicable

2.5. Additional information

No additional information available

Section 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Where concentrations in this product are displayed as ranges, it is due to batch-to-batch variability.

Name	CAS-No.	%
Hydrocarbons (C11 - C20)	-	98 - 100
Naphthalene	91-20-3	< 1
Biphenyl	92-52-4	< 1
Polycyclic Aromatic Compounds	130498-29-2	< 0.5

Section 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Suspected of causing cancer.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. If breathing stops, give artificial respiration.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if irritation persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

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

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after ingestion : May be fatal if swallowed and enters airways.

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

Treat symptomatically.

Section 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the chemical

Fire hazard : Combustible liquid.

Explosion hazard : May form flammable/explosive vapor-air mixture.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Emergency procedures for non-emergency personnel : Evacuate unnecessary personnel.

Emergency procedures for emergency responders : Ventilate area.

6.2. Methods and material for containment and cleaning up

For containment : Dike for recovery or absorb with appropriate material. Do not contaminate ground and surface water.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.3. Reference to other sections

See section 8. Exposure controls/personal protection.

Section 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable. Keep away from heat, sparks, open flames, hot surfaces. - No smoking.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No bare lights. No smoking. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing vapors, mist. Use only outdoors or in a well-ventilated area.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. All efforts should be made to prevent any leaks or spills. Storage tanks should be engineered to prevent contact with water resources, as this material could contaminate the water resources. Surface spills can reach groundwater through porous soil or cracked surfaces. The storage tanks should be monitored regularly for leaks. Where spills or leaks are possible, a comprehensive response plan should be developed and implemented.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, flames, heat sources, sparks. Keep in fireproof place. Keep container tightly closed.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

Section 8: Exposure controls/personal protection

8.1. Occupational Exposure Limits

The following constituents are the only constituents of the product which have a PEL, TLV, or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Diesel Fuel (64742-80-9)		
USA ACGIH	ACGIH TWA (mg/m³)	100 mg/m³ Measured as Inhalable fraction and vapor as total hydrocarbons. ACGIH Skin Notation

Naphthalene (91-20-3)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	50 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm

Biphenyl (92-52-4)		
USA ACGIH	ACGIH TWA (ppm)	0.2 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	0.2 ppm

8.2. Exposure controls

Appropriate engineering controls : Ensure adequate ventilation.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Impermeable protective gloves. 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. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : Wear fire/flame resistant/retardant clothing.

Respiratory protection : An approved organic vapor respirator/supplied air or self-contained breathing apparatus must be used when vapor concentration exceeds applicable exposure limits.

Other information : Do not eat, drink or smoke during use.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : Straw.

Odor : Characteristic.

Odor threshold : No data available

pH : Not applicable

Relative evaporation rate (butyl acetate=1) : No data available

Relative evaporation rate (ether=1) : 600 x slower than ethyether

Melting point : No data available

Freezing point	:	No data available
Boiling point	:	160 (160 - 354.4) °C
Flash point	:	50 (≥ 50) °C Closed cup
Auto-ignition temperature	:	> 200 °C
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapor pressure	:	< 1 mm Hg @ 20°C
Relative vapor density at 20 °C	:	8 Air = 1
Relative density	:	0.87
Solubility	:	Water: 0.1 - 52 mg/l @ 25°C
Log Kow	:	No data available
Viscosity, kinematic	:	1 - 5 cSt at 40°C
Viscosity, dynamic	:	No data available
Explosion limits	:	0.4 - 6 vol %

9.2. Other information

VOC content : 100 %

Section 10: Stability and reactivity

10.1. Reactivity

Combustible liquid.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products formed under fire conditions: carbon monoxide, carbon dioxide, toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Inhalation. Ingestion. Skin and eye contact.

Acute toxicity : Inhalation:dust,mist: Harmful if inhaled.

Combustion of hydrocarbon substances, like this product, produces potentially toxic gases which include carbon monoxide, carbon dioxide, oxides of nitrogen and/or sulfur. Exposure to carbon monoxide gas decreases the ability of the blood to carry oxygen to the body and may be potentially fatal. NIOSH lists the Immediately Dangerous to Life or Health Concentration (IDLH) for carbon monoxide gas as1200 ppm.

Diesel Fuel (64742-80-9)	
LD50 oral rat	≈ 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	4.6 (4.6 - 7.6) mg/l/4h Inhalation form: aerosol (mist)

Skin corrosion/irritation : Causes skin irritation.

Diesel Fuel (64742-80-9)	
Skin Irritation Data	Primary Irritation Index = 4.3-5.6

Hydrocarbons (C11 - C20) (-)	
Skin Irritation Data	Primary Irritation Index = 4.3-5.6

Serious eye damage/irritation : Not classified

Hydrocarbons (C11 - C20) (-)	
Eye Corrosion / Irritation Data	Overall Irritation Score: 1 Irritation was reversible at 48 hours post exposure. Classification 2B

Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Suspected of causing cancer. IARC has classified diesel exhaust emissions as a Class 1 carcinogen - carcinogenic to humans. Prevent exposure to diesel exhaust emissions.

Naphthalene (91-20-3)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

Polycyclic Aromatic Compounds (130498-29-2)	
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen
Additional information	**This product may contain polycyclic aromatic hydrocarbons, PAHs (also called polynuclear aromatics, PNAs or Aromatic Hydrocarbons, polycyclic), some of which are suspected of causing skin cancer in humans under conditions of poor personal hygiene and prolonged, repeated contact. Wear chemically impervious gloves. Always wash skin with soap and water after skin contact.**

Reproductive toxicity	:	Not classified
Specific target organ toxicity – single exposure	:	May cause drowsiness or dizziness. May cause respiratory irritation.
Specific target organ toxicity – repeated exposure	:	May cause damage to organs (bone marrow, liver, thymus) through prolonged or repeated exposure.
Aspiration hazard	:	May be fatal if swallowed and enters airways.
Potential Adverse human health effects and symptoms	:	Irritation of the respiratory tract. Drowsiness. Dizziness.

Section 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Diesel Fuel (64742-80-9)	
Log Pow	> 3.5
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

Section 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations	:	Dispose in a safe manner in accordance with local/national regulations. Dispose of contents and container in accordance with all local, regional, national and international regulations.
Additional information	:	Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials	:	Avoid release to the environment. Hazardous waste due to toxicity.

Section 14: Transport information

US Transport (DOT) for Bulk Shipments (Non-Bulk Shipments May Differ)

Transport document description	:	UN1202, Diesel fuel, 3, PGIII
UN or NA Number	:	UN1202
Proper Shipping Name	:	Diesel fuel
Primary Hazard Class	:	3 - Flammable liquid
Packing Group	:	PGIII
Hazard labels	:	
Emergency Response Guide (ERG) Number	:	128

In accordance with the definition in 49 CFR § 171.8, a hazardous substance does not include petroleum, including crude oil or any fraction thereof which is not other specifically listed or designated as such in Appendix A to 49 CFR § 172.101. Therefore, this product does not require a RQ designation.

Transport by sea (IMDG)

Transport document description	:	UN1202, DIESEL FUEL, 3, PGIII
UN Number	:	UN1202
Proper Shipping Name	:	DIESEL FUEL
Primary Hazard Class	:	3 - Flammable liquids
Packing Group	:	PGIII
Hazard labels (IMDG)	:	
Cargo name listed in 46 CFR 30.25, Table 30.25-1	:	Oil, fuel: No. 2

Air transport (IATA)

Transport document description	:	UN1202, Diesel fuel, 3, PGIII
UN Number	:	UN1202
Proper Shipping Name	:	Diesel fuel
Primary Hazard Class	:	3 - Flammable Liquids
Packing Group	:	PGIII
Hazard labels (IATA)	:	

Section 15: Regulatory information

15.1. US Federal regulations

EPA TSCA Status

This product is a substance under TSCA (CAS No. 64742-80-9; Distillates (petroleum), hydrodesulfurized middle).

SARA Section 313 Supplier Notification

This product contains the following toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:

CAS number	Chemical name	Concentration
91-20-3	Naphthalene	< 1%
130498-29-2	Polycyclic Aromatic Compounds	< 0.5%

This product contains Polycyclic Aromatic Compounds (PAC). PACs are listed as a category under SARA 313 and include only specific PACs listed in 40 CFR 372.65(c). The US EPA has established Reporting Threshold for PACs of 100 lbs (40 CFR 372.28). If a facility manufactures, processes, or otherwise uses more than 100 lbs per calendar year of the PAC category SARA 313 reporting is required. See EPA "Emergency Planning and Community Right-to-know Act - Section 313: Guidance for Reporting Toxic Chemicals: Polycyclic Aromatic Compounds Category" (EPA # 260-B-01-03).

This information must be included in all Safety Data Sheets that are copied and distributed for this product. For additional information, see 40 CFR §372.45 Notification About Toxic Chemicals.

SARA Section 311/312 Hazard Classes: Acute health hazard
Fire hazard
Chronic health hazard

15.2. International regulations

CANADA

No additional information available

National inventories

Distillates (petroleum), hydrodesulfurized middle (64742-80-9)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on the China Inventory of Existing Chemical Substances (IECSC)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS)

15.3. US State regulations

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity, not limited to any that may be listed below.

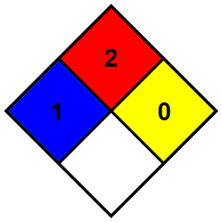
Naphthalene (91-20-3)	
U.S. - California - Proposition 65 - Carcinogens List	Yes
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
No significant risk level (NSRL)	5.8 µg/day

Section 16: Other information

Other information : None.

NFPA (National Fire Protection Association)

NFPA health hazard : 1
NFPA fire hazard : 2
NFPA reactivity : 0



Hazard Rating

Health : 1*
Flammability : 2
Physical Hazard : 0
Personal protection : See section 8 of SDS

US OSHA LABEL as specified under 29 CFR §1910.1200 (f)

Diesel Fuel

Total Petrochemicals & Refining USA, Inc.
PO Box 674411
Houston, TX 77267-4411 USA
Tel. 713-483-5000

Danger

Flammable liquid and vapour
May be fatal if swallowed and enters airways
Causes skin irritation
Harmful if inhaled
May cause respiratory irritation
May cause drowsiness or dizziness
Suspected of causing cancer
May cause damage to organs (bone marrow, liver, thymus) through prolonged or repeated exposure
Toxic to aquatic life with long lasting effects

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, hot surfaces, open flames, sparks. - No smoking.
Keep container tightly closed.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical, lighting, ventilating equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe mist, spray, vapors.
Wash hands, forearms and face thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Wear eye protection, impermeable protective gloves, flame retardant protective clothing.
Specific treatment (see Section 4.1 of SDS or information on this label).
If swallowed: Immediately call doctor, poison center.
Do NOT induce vomiting.
If on skin: Wash with plenty of water.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation occurs: Get medical advice/attention.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If exposed or concerned: Get medical advice/attention.
Get medical advice/attention if you feel unwell.
Take off contaminated clothing and wash it before reuse.
In case of fire: Use water spray or fog, foam, dry chemical, carbon dioxide (CO2) to extinguish.
Collect spillage.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental Information

Product can accumulate electrostatic charges that may cause fire by electrical discharges.

Version : 2.0
Date of issue : April 6, 2018

MSDS ID: DIESEL
SDS REFERENCE NUMBER: RF0049

SDS Template - TOTAL SDS US (GHS HazCom 2012) TPRI Version 5.01