

Safety (MSDS) data for Diesel (Gas Oil)

Name: Diesel (Gas Oil) No. Identification: Synonyms: diesel fuel, diesel oil Molecular formula: Reference: The Physical and Theoretical Chemistry Laboratory Oxford University Marathon MFA Oil	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr style="background-color: red; color: white;"> <td>Flammability:</td> <td style="text-align: center;">2</td> </tr> <tr style="background-color: blue; color: white;"> <td>Health:</td> <td style="text-align: center;">0</td> </tr> <tr style="background-color: yellow;"> <td>Reactivity:</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Special Hazard:</td> <td></td> </tr> <tr style="background-color: #cccccc;"> <td colspan="2">HAZARD RATING:</td> </tr> <tr> <td style="text-align: center;">Least</td> <td style="text-align: center;">Slight</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">Moderate</td> <td style="text-align: center;">High</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">Extreme</td> <td style="text-align: center;">4</td> </tr> <tr> <td style="text-align: center;">N/A: <u>N</u>ot <u>A</u>pplicable</td> <td style="text-align: center;">N/E: <u>N</u>ot <u>E</u>stablished</td> </tr> </table>	Flammability:	2	Health:	0	Reactivity:	0	Special Hazard:		HAZARD RATING:		Least	Slight	0	1	Moderate	High	2	3	Extreme	4	N/A: <u>N</u> ot <u>A</u> pplicable	N/E: <u>N</u> ot <u>E</u> stablished
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Physical data:		Combustion & Explosion																					
Appearance: Light blue to green, clear Vapour Density: (Air =1) >1 Vapour Pressure: <1 at 20°C (68°F) Specific Gravity: (Water =1) <1 Density(g cm⁻³): 0.75 g/l Water Solubility: insoluble Soluble: methanol, ethanol, chloroform, ether, organic solvents Melting Point: N/A Boiling Point: -33.30°C(-27.94°F) Freezing Point: N/A Odor: , bright liquid with a mild petroleum odor.		Flash Point: 52-96°C (126-205°F) Explosion Limits: (Volume percent in Air) 0.6%(LEL) & 7.5 % (UEL) Autoignition Temperature: 254.4 - 285 °C (490-545°F) Fire Fighting: Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Let the fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For tank, rail car or tank truck: Evacuation radius: 800 meters (1/2 mile). Do not attempt to extinguish fire unless flow of material can be stopped first. Flood with fine water spray. Do not scatter spilled material with high-pressure water streams. Cool containers with water spray until well after the fire is out. Apply water from a protected location or from a safe distance. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Extinguishing Media: foam, water spray (fog), dry chemical, carbon dioxide and vaporizing type extinguishing agents may be suitable for extinguishing fires involving this type of product, depending on the potential size of the fire. Fire Hazard: Moderate fire hazard. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Vapor/air mixtures are explosive above flash point.																					
Accidental Release Measures																							
Avoid heat, flames, sparks and other sources of ignition. Stop leak if possible without personal risk. Reduce vapors with water spray. Small spills: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Large spills: Dike for later disposal. Remove sources of ignition. Keep unnecessary people away, isolate hazard area and deny entry.																							
Stability and reactivity																							
Stable. Flammable. Incompatible with strong acids, strong oxidizing agents, halogens.																							

Toxicology:

Respiratory And Skin Irritant. The Product May Contain Polycyclic Aromatic Hydrocarbons Which May Be Carcinogenic. Generally Regarded As Being Of Low Toxicity Unless Contact Is Repeated And/Or Prolonged.

Toxicity data

ORL-RAT LD50 2000 mg kg⁻¹

Risk phrases:

1) **R10:**Flammable

Handling and storage

Ground and bond all transfer and storage equipment. Drums must be grounded/ bonded/ equipped with self-closing valves, pressure vacuum bungs and flame arrestors. Store away from ignition sources in a cool area. Outside or detached storage is preferred. When handling use non-sparking tools and equipment. Do not use as a cleaner or solvent, use only as fuel. Do not siphon by mouth.

Exposure controls /Personal protection

ENGINEERING CONTROLS: Provide ventilation sufficient to prevent exceeding recommended exposure limit or build-up of explosive concentrations of vapor in air. Use explosion-proof equipment.

PERSONAL PROTECTION: If contact is likely the following protective clothing and equipment is recommended.

PROTECTIVE CLOTHING:Use full-face shield, chemical goggles, impervious gloves, boots and whole body protection.

RESPIRATOR:Approved respiratory protection must be used when vapors or mist concentrations are unknown or exceed the TLV. Avoid prolonged or repeated breathing of vapor or mists.

First Aid Measures:

General: Remove all clothing impregnated with material immediately. Consult a physician for major exposures of inhalation or skin contact.

Inhalation: Remove from further exposure. If unconsciousness occurs, seek immediate medical assistance. If breathing stops, use mouth-to-mouth resuscitation.

Eye Contact: Flush immediately with water for at least 15 minutes. Seek medical attention promptly.

Skin Contact: Discard contaminated leather articles. Wash contact areas with soap and water. Launder contaminated clothing before reuse.

Ingestion: DO NOT INDUCE VOMITING. Get medical assistance promptly. (Note to Physician: Material, if aspirated into lungs, may cause chemical pneumonitis. Treat appropriately.)