



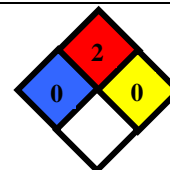
MATERIAL SAFETY DATA SHEET



VLSFO

Section 1 – Chemical Product and Company Identification

Chemical Name :	VLSFO
Chemical Formula :	Complex mixture of hydrocarbons
CAS Number :	
Synonyms :	Fuel Oil, Furnace Oil, Residual Oil
General Use :	Fuel in furnaces
Manufacture's Name :	Bharat Petroleum Corporation Limited
Address :	Refinery, Mahul, Chembur, Mumbai 400074
Telephone Number for Info :	25533888 / 25533999 / 25524888 / 25524999
MSDS No. :	
Date Prepared :	June 2019
Revision # :	2



NFPA 704 (Sec 16)

Section 2 – Composition / Information on Ingredients

Composition :	Complex mixture of heavy hydrocarbons
Hazardous Components :	All components non toxic / inflammable
ACGIH TLV :	5 mg / m ³ as mineral oil mist

Section 3 – Hazards Identification

Primary Entry Routes :	Skin, eyes and ingestion
Acute Effects :	Prolonged exposure makes skin dry, erythema, oil acne, and oil folliculitis. Warty growth may occur which may become skin cancer, skin cracking & contact dermatitis. As these are handled at elevated temperatures, skin contact could produce burns. Eye Contact: Light to moderate irritation.
Carcinogenicity :	Not listed as carcinogenic
Chronic Effects :	No data available

Section 4 – First Aid Measures

Eyes :	Flush with water for 15 min. Get medical attention.
Skin :	Wash with warm water & soap.
Inhalation :	Remove to fresh air. Consult a physician if irritation persists.
Ingestion :	Get medical help at once. Do not induce vomiting. It may lead to chemical pneumonitis.

Section 5 – Fire Fighting Measures

Flash Point :	> 66 °C
Flash Point Method :	Pensky Marten
Auto ignition Temperature :	220 to 250 °C

LEL :	1.0 %
UEL :	5.0 %
Flammability Classification :	Flammable
Extinguishing Media :	Foam, Dry Chemical Powder, CO2
Unusual Fire or Explosion Hazards :	Heat produces vapours and can cause rupture of containers. Tanks head space can have light hydrocarbons. Flashback may occur along vapour trail
Hazardous Combustion Products :	Carbon di oxide, carbon mono oxide
Fire-Fighting Instructions :	Small fires extinguish by handheld extinguisher. Major fire may require withdrawal and allowing the tanks to burn.

Section 6 – Accidental Release Measures

Small Spills :	Shut off leaks without risk. Absorb on sand or earth.
Containment :	Prevent spillage from entering drains or water sources
Cleanup :	After spills wash area with soap and water preventing runoff from entering drains:

Section 7 – Handling and Storage

Handling Precautions :	Do not use/store near heat/open flame. Use PPE's. Avoid contact with skin and eyes. Wash thoroughly after handling
Storage Requirements :	Do not use/store near heat/open flame/water/acids

Section 8 – Exposure Controls / Personal Protection

Engineering Controls :	Provide proper ventilation for environment.
Respiratory Protection :	Use respiratory protection if ventilation is improper
Protective Clothing / Equipment :	Use face shield, PVC gloves, safety boots while handling. Contaminated clothing to be immediately removed

Section 9 – Protection Physical and Chemical Properties

Physical state :	Liquid
Appearance and Odour:	Brownish to black
Vapor pressure:	0.1 psi at 38 °C
Specific gravity:	0.95 to 0.98 gm / cc at 15 °C
Water solubility :	Insoluble
Boiling point:	Data not available
Freezing point:	30 °C
Vapour density:	Heavier than air (Air = 1)

Section 10 – Stability and Reactivity

Stability:	Chemically stable.
Chemical Incompatibilities :	Incompatible with oxidizing agents & chlorine. Reacts vigorously with oxidising materials.
Conditions to avoid:	Can undergo auto-oxidation in air & generate heat which can build up in a confined space to cause spontaneous combustion
Hazardous Decomposition Products:	Carbon dioxyde, Carbon monoxyde

Section 11 – Toxicological Information

TLV as per ACIGH : 5 mg / m³ as mineral oil mist
Acute Inhalation Effects : No data available

Section 12 – Ecological Information

Prevent spillage from entering drains or water sources. After spills wash area with soap and water preventing runoff from entering drains. Can burn with lot of heat producing CO₂ and CO.

Section 13 – Disposal Considerations

Seal all the waste in vapour tight plastic bags for eventual disposal or incineration.

Section 14 – Transport Information

Shipping Name : VLSFO or Fuel Oil or Furnace Oil

Section 15 – Regulatory Information

Non - Toxic/Flammable Substance

Section 16 – Other Information

Prepared by: Process Safety Section

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