## **PETRON LSFO-1**

SECTION 1:	PRODUCT AND COMPANY IDENTIFICATION		
Product Name	PETRON LSFO-1		
Manufacturer	PETRON CORPORATION JESUS ST., PANDACAN, MANILA		
Chemical Family	Petroleum Hydrocarbons		
Product Type	Low Sulfur (1.0% maximum) Residual Fuel		
Emergency Phone No.	(632) 563-31-21		
NFPA Hazard Identification	2 0	Hazard Blue - Health Red - Flammability Yellow - Reactivity White - Special	Degree of Hazard 0 - Least 1 - Slight 2 - Moderate 3 - High 4 - Extreme
SECTION 2:	COMPOSITION / INFORMATION ON INGREDIENTS		
Hazardous Ingredients	The product predominantly consists of aliphatic, alicyclic and aromatic hydrocarbons. In general, the product is combustible and may contain carcinogenic components. However, as long as normal precautions in handling petroleum products are observed and good standards of industrial and personal hygiene are maintained no significant safety and health hazard is expected.		
SECTION 3:	HAZARDS IDENTIFICATION		
Primary Entry Routes	Inhalation of vapors, eye contact, skin contact/absorption		
Target Organs	Respiratory system, eyes, skin		
Eye Contact	May cause eye irritation upon direct contact.		
Skin Contact	Low order of toxicity under normal use. However, avoid prolonged or repeated contact with the product to prevent defatting and dermatitis. Carcinogenic materials are also present.		
Ingestion	Ingestion is an unlikely event. vomiting and aspiration into pneumonitis, which can be fata	the lungs. This can	0



Inhalation	Under normal conditions, the product may not be considered an inhalation hazard. However, hydrogen sulfide, which is classified as very toxic by inhalation, can be present at trace levels in the liquid and can be liberated into the vapor phase above the liquid where it can reach potentially hazardous concentrations. Prolonged exposure to vapors or oil mists may also lead to chronic inflammatory reaction of the lungs and a form of pulmonary fibrosis.
Workplace Exposure Limits	No limit is known for the product. However, available information recommends a maximum exposure limit of 100 ppm (8-hour Time Weighted Average) for aromatic and aliphatic compounds, which may be present as

mixed hydrocarbons in air. Oil mists must not exceed  $5 \text{ mg/m}^3$ .

relevant authorities, taking measures to minimize the effects on ground

Recover from surface by skimming or pumping using explosion-

SECTION 4:	FIRST AID MEASURES	
Eye Contact	Rinse eyes immediately with plenty of water for at least 15 minutes o until irritation subsides. If irritation persists, get prompt medica attention.	
Skin Contact	Immediately clean contaminated skin with soap and water. Remove contaminated clothing, including shoes, and launder before reuse.	
Ingestion	If swallowed, DO NOT induce vomiting due to risk of aspiration into the lungs. Give plenty of water to drink. Keep at rest and seek medical attention immediately.	
Inhalation	If overexposed to oil mist, remove affected person immediately to fresh air. Administer artificial respiration if breathing is irregular or has stopped. Call for prompt medical attention.	
SECTION 5:	FIRE FIGHTING MEASURES	
Flash Point, PM, °C	75	
Extinguishing Media	In case of fire use foam, carbon dioxide or dry chemical extinguishers.	
Special Fire-fighting Procedures	Do not use water to extinguish fire unless in conjunction with foam compound or in cooling exposed surfaces or containers. Vapors are heavier than air and may travel considerable distances to a source of ignition and flashback.	
Decomposition Products under Fire Conditions	Carbon dioxide, carbon monoxide, particulate matter, water, polycyclic aromatic hydrocarbons, nitrogen oxides, hydrogen sulfide, unburnt hydrocarbons, unidentified organic and inorganic compounds are expected from normal combustion.	
SECTION 6:	ACCIDENTAL RELEASE MEASURES	
Land Spill	Taking normal safety precaution, shut off source of product. Prevent the liquid from entering sewers, water courses or low-lying areas. Advise the relevant outborities, taking measures to minimize the effects on provide	

water.



Rev1 cdudde Issue Date: 04/2006 Page 2 of 5 proof equipment, booms or other suitable absorbent and remove mechanically into containers. If necessary, dispose material according to regulations of local authorities and environmental agencies.

Water SpillUse booms to confine spills immediately. Remove from the water surface<br/>by skimming or with suitable absorbents. If permitted by local authorities<br/>and environmental agencies, disperse the residue in unconfined waters.<br/>Consult an expert on disposal of recovered material and ensure conformity<br/>to local disposal regulations.

## SECTION 7: HANDLING AND STORAGE Handling Procedures Keep away from potential sources of ignition. Open container in a wellventilated area. Avoid breathing vapors. Keep containers closed when not in use. Prevent small spills and leakages to avoid slip hazard. Wash thoroughly after handling. "Empty" containers and retain product residue (liquid or vapor) can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat, flame, sparks, static electricity or other sources of ignition; they may explode and cause death or injury. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of. Storage Procedures Store in cool, well ventilated areas, away from sources of ignition. SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION Ventilation Procedures Use local exhaust ventilation to control mists or vapors. Additional ventilation or exhaust may be required to maintain air concentrations below exposure limits. **Gloves Protection** Use chemical resistant gloves. **Eye Protection** In case of splashing, wear safety glasses with side shields. **Respiratory Protection** Use NIOSH/MSHA approved full-face respirator with a combination organic vapor and high efficiency filter cartridge if the recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill cleanup sites. Wear either a chemical protective suit or apron when potential for **Clothing Recommendation** contact with material exists. Use neoprene or nitrile rubber boots when necessary to avoid contaminating shoes. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES Density at 15°C, kg/m3 951.7 Water Solubility Insoluble



Odor	Characteristic of petroleum products
Appearance	Black liquid
Viscosity at 50°C, cSt	150
SECTION 10:	STABILITY AND REACTIVITY
Stability	Material is normally stable at ambient temperature
Incompatibility	Strong oxidizing agents
Polymerization	Will not occur
Hazardous Decomposition Products	In case of combustion or thermal decomposition, carbon monoxide and other toxic and irritant fumes may be formed.
SECTION 11:	ECOLOGICAL INFORMATION
Ecotoxicity	Harmful to aquatic organisms and may cause long-term adverse effects to the aquatic environment; biodegradable in aerobic conditions but not biodegradable in anaerobic conditions with high bioaccumulation potential.
SECTION 12:	DISPOSAL CONSIDERATIONS
Waste Disposal	Material, if discarded, is expected to be hazardous waste. The product may be burned under controlled conditions and should be in compliance with local and national waste management regulations.
SECTION 13:	TRANSPORT REGULATIONS
Land	This product is not regulated for road / rail transport
Sea	IMDG (Packaged Goods and BLCs). This product is not regulated for sea transport
Air	(ICAO / IATA). This product is not regulated for air transport
SECTION 14:	APPROVALS
Approvals	Technical Department Petron Corporation

This is a computer-generated form and does not require a signature.

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