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An Axel Johnson, Inc. Company

MATERIAL SAFETY DATA SHEET

LOW SULFUR
DIESEL

Revised 8/01; 07/19/02; 06/05.
4 Pages

SECTION 1 - MATERIAL IDENTIFICATION		24 HOUR EMERGENCY INFO:	
PRODUCT / CHEMICAL NAME:	LOW SULFUR DIESEL	Sprague:	603-431-1000
PRODUCT / CHEMICAL SYNONYMS:	HIGHWAY DIESEL FUEL OIL, #2 FUEL OIL (LOW SULFUR)	Chemtrec:	800-424-9300
CHEMICAL FAMILY / FORMULA:	BRANCHED CHAIN HYDROCARBONS / VARIABLE	HMIS / NFPA HAZARD RATING	<p>← FIRE ← REACTIVITY ← OTHER ↑ HEALTH</p>
MATERIAL USE OR OCCURRENCE:	-	4=EXTREME 3=SERIOUS 2=MODERATE 1=SLIGHT 0=MINIMAL	

SECTION 2 - INGREDIENTS & RECOMMENDED OCCUPATIONAL EXPOSURE LIMITS				
COMPOSITION	% WEIGHT AS RECEIVED	C.A.S. NO.	OSHA PEL	ACGIH TLV
LOW SULFUR DIESEL	99	68476-34-6	5 mg/M3 (mineral oil mist.)	5 mg/M3
Petroleum distillate fraction consisting of a complex mixture of parafinic, olefinic, and naphthenic hydrocarbons, plus fused polycyclic hydrocarbons (C10 and higher) as benzene solubles.				
POLYCYCLIC HYDROCARBONS	<1	08-007-452	.2 mg/M3 (benzene solubles as coal tar pitch volatiles)	0.2 mg/M3

SECTION 3 - PHYSICAL DATA			
IGNITION TEMPERATURE:	340°-700°F (171°-371° C)	% VOLATILITY BY VOLUME:	Greater than 50%
MELTING POINT:	1 mm Hg @ 68° F (20° C)	VAPOR DENSITY (AIR = 1):	Greater than 5
AVERAGE SPECIFIC GRAVITY (H2O = 1):	0.86	SOLUBILITY IN WATER:	Non-soluble
EVAPORATION RATE (n-butyl acetate = 1): None Determined			
APPEARANCE & ODOR: Clear, slightly viscous liquid.			

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA	
FLASH POINT: 125° - 180° F. (38° - 82° C) (Tag. Closed Cup)	
AUTOIGNITION TEMP: >500° F (>260° C)	
EXTINGUISHING MEDIUM: Foam, carbon dioxide, dry chemical, for larger fires use water spray, fog, or foam.	
SPECIAL FIRE FIGHTING PROCEDURES: Use supplied-air breathing equipment for enclosed areas. Cool exposed containers with water spray. Continue water spray until entire container contents are cool. Withdraw immediately in the event of rising sound from venting safety device or any discoloration of storage tank due to fire (subject to the fire chief's directions).	
UNUSUAL FIRE AND EXPLOSION HAZARDS: Do not mix or store with strong oxidants. Do not store or pour near sources of ignition. Do not pressurize, cut, heat, weld, or expose empty containers to sources of ignition. Vapors are heavier than air and may travel a considerable distance to a source of ignition and flash back.	

SECTION 5 - HEALTH DATA
TOXICOLOGICAL TEST DATA:

Rat; LD50

RESULTS:

9,000 mg/kg (NIOSH RTECS July 1993)

	ACUTE HEALTH EFFECTS	CHRONIC HEALTH EFFECTS
INHALATION	Mist or vapor may cause respiratory tract irritation. CNS depressant. High levels may cause giddiness, headache, dizziness, nausea, vomiting, and loss of coordination, narcosis, stupor, coma, and unconsciousness.	Prolonged exposure may cause dizziness, weakness, weight loss, anemia, nervousness, and pain in the limbs, peripheral numbness, and paresthesia. Renal failure possible. Degenerative changes of liver and kidneys may occur after prolonged exposure to high concentrations.
INGESTION	Irritation, giddiness, vertigo, headache, anesthetic stupor, CNS depression, coma and death.	No data available
SKIN CONTACT	Drying, cracking, and defatting dermatitis. Direct contact may cause extreme irritation with severe erythema and edema with blistering and open sores. Absorption of large amounts may result in narcosis.	Repeated or prolonged exposure may cause irritation, dermatitis, and a rash of pimples and spots.
EYE CONTACT	Irritation of the eye is possible. However, animal studies indicate that irritation is unlikely.	No data available

FIRST AID

PROCEDURES

INHALATION: Remove from vapor to fresh air. If breathing has stopped, give artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.

INGESTION: **DO NOT INDUCE VOMITING.** If more than 1 mg/kg of petroleum distillates are swallowed, remove by gastric lavage by qualified medical personnel. If vomiting occurs, keep person's head lower than hips to help prevent pulmonary aspiration. After vomiting stops, give 30-60 ml of Fleet's Phospho-Soda diluted 1:4 in water. Get medical attention immediately.

SKIN CONTACT: Remove contaminated clothing. Wipe off excess oil with a dry cloth and then wash affected area with soap or mild detergent and large amounts of water until no evidence of chemical remains (approximately 15-20 minutes). If irritation develops, seek medical aid.

EYE CONTACT: Flush eyes immediately with copious amounts of water, occasionally lifting upper and lower lids until no evidence of chemical remains (approximately 15-20 minutes). If irritation develops, seek medical aid.

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SECTION 6 - REACTIVITY DATA

STABILITY:	Stable under normal temperatures and pressures.
HAZARDOUS POLYMERIZATION:	Hazardous polymerization has not been known to occur under normal temperatures and pressures.
CONDITIONS TO AVOID:	May be ignited by heat, sparks, or flame. Vapors may travel to a source of ignition and flash back. Vapor explosion hazard indoors, outdoors, or in sewers.
INCOMPATIBLES:	May react when exposed to oxidizing materials.
TYPICAL DECOMPOSITION PRODUCTS:	Thermal decomposition may release various hydrocarbons and hydrocarbon derivatives including carbon dioxide, water, organic acids, and aldehydes.

SECTION 7 - SPECIAL PROTECTION

RESPIRATORY PROTECTION:	Use with adequate ventilation. For large spills or when completing work in confined spaces, use a mask with an organic vapor cartridge or positive pressure air-supplied (SCBA) unit.
VENTILATION	Indoors, use lab hood. Outdoors, work upwind.
LOCAL EXHAUST: MECHANICAL (General):	Recommended for use in enclosed or semi-enclosed work areas.
EYE PROTECTION:	Splash goggles or safety glasses with side shields.
PROTECTIVE GLOVES:	Neoprene, PVC
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:	Employee must wear appropriate impervious clothing and equipment to prevent repeated or prolonged skin contact with this substance.

SECTION 8 - SPECIAL PRECAUTIONS

PRECAUTIONS FOR SAFE HANDLING & STORAGE:	Avoid excessive inhalation or skin contact. Isolate from sources of ignition.
SPILL AND LEAK PROCEDURES:	Shut off ignition sources (no smoking, shut off flames or flares in hazard area). Isolate hazard area and restrict entry. If properly trained, proceed with the following measures: <ol style="list-style-type: none">For small spills, take up with sand or other absorbent material and place into containers for alter disposal; andFor large spills, dike far ahead of spill to prevent entrance into watercourses and/or ground water. Observe local, state and federal governmental spill and water quality regulations.
WASTE DISPOSAL METHOD:	<ol style="list-style-type: none">Under EPA RCRA (40 CFR 261.21), if this product becomes a waste material intended for disposal and has a flash point below 140° F, it would be ignitable hazardous waste (waste code number D001). Refer to latest EPA or state regulations regarding proper disposal.Under EPA RCRA (40 CFR 261.21), if this material becomes a waste material intended for disposal and has a TCLP benzene conc. Greater than 0.5 ppm, it would be a toxic waste (waste code number D018). Refer to latest EPA or state regulations regarding proper disposal.



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SECTION 9 - DOT HAZARDOUS MATERIAL INFORMATION

Table with 3 columns: PROPER SHIPPING NAME, HAZARD CLASS, PACKING GROUP, REQUIRED PLACARDING, N.A./U.N. NUMBER.

SECTION 10 - EPA SARA TITLE III INFORMATION

Table with 4 columns: SECTION 311/312 HAZARD CLASSIFICATION, ACUTE, FIRE, CHRONIC, PRESSURE, REACTIVE.

SECTION 11 - REMARKS

None.

SECTION 12 - ADDITIONAL REGULATORY DATA

Table with 5 columns: REPORTABLE COMPONENTS, FEDERAL EPA, %, SARA RQ, CERCLA RQ, RCRA NO. Includes #2 FUEL OIL and regulatory notes.

NOTE: OSHA Regulations 29 CFR 1910.1200 (Hazard Communication) do not consider coal as a "hazardous material" and a Material Safety Data Sheet (MSDS) is not required.