



GARY-WILLIAMS
ENERGY CORPORATION

MATERIAL SAFETY DATA SHEET

October 20, 2004

MSDS NUMBER

W-3035

**EMERGENCY TELEPHONE
NUMBERS**

COMPANY

405-665-6565

CHEMTREC

800/424-9300

I. PRODUCT IDENTIFICATION

PRODUCT	DIESEL FUEL (CLEAR)	CHEMICAL NAME AND SYNONYMS	Petroleum Hydrocarbon Mixture, Distillate, 2- Oil # 2 Diesel Fuel, Fuel Oil #2,
CHEMICAL FAMILY	Petroleum Hydrocarbon Distillate	FORMULA	C11 - C20
National Fire Protection Association Hazard Rating Codes		HEALTH COD	FIRE CODE
Least - 0	Slight - 1		
Moderate - 2	High - 3	0	2
	Extreme - 4		0

II. SUMMARY OF HAZARDS

CAUTION! COMBUSTIBLE LIQUID AND VAPOR. HARMFUL IF INHALED AND MAY CAUSE DELAYED LUNG INJURY. CAN CAUSE NERVOUS SYSTEM DEPRESSION. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Keep away from heat and flame. Avoid breathing vapor. Use ventilation adequate to keep vapor below recommended exposure limits. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

NIOSH, EPA, & current literature have indicated that breathing whole diesel exhaust over a working lifetime may cause cancer in humans. Animals exposed to whole diesel exhaust over a lifetime have developed lung tumors (cancer). Diesel exhaust may cause eye irritation, headache, light-headedness, nausea, vomiting, heartburn, weakness, numbness, tingling in the extremities, chest tightness and wheezing. Cough and labored breathing have been reported in garage workers without adequate ventilation (air circulation) in the garage.

DOT Hazardous Material	DOT SHIPPING NAME AND NUMBER	DOT HAZARD CLASS
YES	Diesel Fuel, 3, NA1993, III	3
		(Flammable Liquid)

III. HAZARDOUS COMPONENTS

INGREDIENT	% RANGE	PEL/TLV	HAZARD
Straight Run Middle Distillate (CAS # 64741-44-2)	60 to 100 %	Petroleum Distillate TWA - 400 ppm	Combustible Acute Health Chronic Health
Light Catalytic Cracked Distillate (CAS # 64741-59-9)	0 to 40 %	Petroleum Distillate TWA - 400 ppm	

Diesel exhaust contains: Nitrogen Dioxide, Sulfuric Acid, Sulfur Dioxide, Aliphatic Aldehydes, Soot containing Polynuclear Aromatic Hydrocarbons, Carbon Monoxide, Hydrogen Sulfide.

IV. HEALTH INFORMATION

EXPOSURE BY ROUTE OF ENTRY	EXPOSURE CHARACTERISTICS AND FIRST AID	
INHALATION	EFFECTS	Acute: Headache, nasal and respiratory irritation, nausea, drowsiness, breathlessness, fatigue, central nervous system depression, convulsions, and loss of consciousness.
	FIRST AID	Move exposed person to fresh air. If breathing has stopped, perform artificial respiration. Get medical attention as soon as possible.
SKIN	EFFECTS	Acute: irritation Chronic: dermatitis
	FIRST AID	If clothing soaked, immediately remove clothing and wash skin with soap and water. Launder clothing before wearing. Get medical attention promptly.
EYES	EFFECTS	Acute: irritation
	FIRST AID	Immediately flush eyes with water for a minimum of 15 minutes, occasionally lifting the lower and upper lids. Get medical attention promptly.
SWALLOWING INGESTION	EFFECTS	Acute: aspiration hazard, headache, nausea, drowsiness, fatigue, pneumonitis, pulmonary edema, central nervous system depression, convulsions and loss of consciousness.
	FIRST AID	Call a physician immediately, ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person
Medical conditions Generally Aggravated by Exposure N/AV		
LISTED AS POTENTIAL CARCINOGEN OR CARCINOGEN	NOT LISTED ☒ NATIONAL TOXICOLOGY PROGRAM _____ INTERNATIONAL Agency for Research on Cancer _____ OSHA _____	

V. EMPLOYEE PROTECTION

RESPIRATORY PROTECTION (NIOSH APPROVED RESPIRATORS SEE OSHA STD. 1910.134)

Up to 4000 ppm, half-mask organic vapor respirator. Up to 20,000 ppm, full-face organic vapor respirator or full-face supplied air respirator. Greater than 20,000 ppm, fire fighting, or unknown concentration, self-contained breathing apparatus with positive pressure.

EYE	Safety glasses, chemical goggles or face shield as appropriate.
SKIN	Gloves: Nitrile, neoprene or other material resistant to distillate.

VENTILATION

Maintain local or dilution ventilation to keep air concentration below 400 ppm. Loading, unloading, tank gauging, etc., remain upwind. Request assistance of safety and industrial hygiene personnel to determine air concentrations.

VI. FIRE PROTECTION INFORMATION

FLASH POINT AND METHOD	AUTOIGNITION TEMPERATURE ESTIMATED	FLAMMABLE LIMITS % VOLUME IN AIR ESTIMATED	LOWER 0.7	UPPER 6
Tag Closed Cup 130 °F	490 °F			

EXTINGUISHING MEDIA

Carbon dioxide, dry chemical, or foam. Water stream may spread fire, use water spray only to cool containers exposed to fire. If leak or spill has not ignited, use water spray to disperse the vapors.

HAZARDOUS DECOMPOSITION PRODUCTS

Incomplete combustion can yield carbon monoxide and various hydrocarbons.

FIRE AND EXPLOSION HAZARDS

Can form combustible mixtures with air when heated.

STORAGE

Do not store with strong oxidizers. Store as OSHA Class II combustible liquid.

HAZARDOUS POLYMERIZATION	STABILITY
WILL NOT OCCUR X MAY OCCUR _____	STABLE X UNSTABLE _____

VII. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT 330 - 675 °F	Reid VAPOR PRESSURE (RVP) at 100 °F ESTIMATED less than 0.1 pound	EVAPORATION (ETHYL ETHER = 1) ESTIMATED slower
PERCENT VOLATILE BY VOLUME (%) 100	AVG. MOLECULAR WEIGHT N/A	APPEARANCE May be clear to yellow-brown
ODOR Diesel Fuel	DROP POINT Pour Point -25 to +10 °F	ESTIMATED VAPOR DENSITY (AIR = 1) 6
SPECIFIC GRAVITY 0.8 to 0.9	VISCOSITY 2 to 4 cs at 100°F	SOLUBILITY (G/100g WATER AT 20° C) Negligible

VIII. ENVIRONMENTAL PROTECTION

S P I L L S	Notify emergency response personnel. Evacuate area and remove ignition sources. Build dike to contain flow. Remove free liquid, do not flush to sewer or open water. Pick up with inert absorbent and place in closed container for disposal.
D W I A S S P T O E S A L	Utilize licensed waste disposal company. Consider recycling or incineration. Utilize permitted hazardous waste disposal site or industrial waste disposal site as appropriate.

ADDITIONAL INFORMATION

The following chemicals are subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and reauthorization Act of 1986 and 40 CFR Part 372:

PREPARED BY

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DATE PREPARED

October 20, 2004

DISCLAIMER

The information and recommendations contained in this publication have been compiled from sources believed to be reliable and to represent the best current opinion on the subject at the time of publication. Since we cannot anticipate or control the many different conditions under which this information or our products may be used, we make no guarantee that the recommendations will be adequate for all individuals or situations. Each user of the product described herein should determine the suitability of the described product for his particular purpose and should comply with all federal and state rules and regulations concerning the described product.

ABBREVIATIONS

CAS #	Chemical Abstracts Service Number
N/A	Not Applicable
N/AV	Not Available
ppm	Parts per million
PEL	Permissible Exposure Limit
TLV	Threshold Limit Value
	Both the OSHA PEL and the American Conference of Governmental Industrial Hygienists TLV were reviewed. Where a difference existed, the more restrictive of the two was selected.
STEL	Short Term Exposure Limit
TWA	Time-Weighted Average