

## Moco Material Safety Data Sheet

## REGULAR UNLEADED GASOLINE

#### Section 1 Chemical Product and Company Information

SUPPLIER'S NAME...... NOCO ENERGY CORP

SUPPLIER'S ADDRESS....... 700 Grand Island Blvd., Tonawanda, NY 14150

SUPPLIER NUMBER...... 1-800-500-6626

SUPPLIER IDENTIFIER...... Conventional Gasoline

EMERGENCY PHONE NUMBER ...... 1-800-424-9300 Chemtrec

#### Section 2 Composition/Information on Ingredients

Component	CAS No.	Amount (Vol%)
LIGHT PETROLEUM DISTILLATE	8006-61-9	0 - 99.9
TOLUENE	108-88-3	0 - 30
XYLENE	1330-20-7	0 - 25
CYCLOHEXANE	110-82-7	0 - 9
ETHYL BENZENE	100-41-4	0 - 5
N-HEXANE	110-54-3	0 - 5
NAPHTHALENE	91-20-3	0 - 5
1,2,4-TRIMETHYLBENZENE	95-63-6	0 - 5
BENZENE	71-43-2	0.1 - 4.9
CUMENE	98-82-8	0 - 1

#### **EXPOSURE GUIDELINES**

	CAS No.	Governing Body	Exposure Limits		
BENZENE	71-43-2	ACGIH	STEL	2.5	ppm
BENZENE	71-43-2	OSHA	STEL	5	ppm
BENZENE	71-43-2	ACGIH	TWA	0.5	ppm
BENZENE	71-43-2	OSHA	TWA	1	ppm
CUMENE	98-82-8	ACGIH	TWA	50	ppm
CUMENE	98-82-8	OSHA	TWA	50	ppm
CYCLOHEXANE	110-82-7	ACGIH	TWA	100	ppm
CYCLOHEXANE	110-82-7	OSHA	TWA	300	ppm
ETHYL BENZENE	100-41-4	ACGIH	STEL	125	ppm
ETHYL BENZENE	100-41-4	ACGIH	TWA	100	ppm
ETHYL BENZENE	100-41-4	OSHA	TWA	100	ppm
N-HEXANE	110-54-3	ACGIH	TWA	50	ppm
N-HEXANE	110-54-3	OSHA	TWA	500	ppm
NAPHTHALENE	91-20-3	ACGIH	STEL	15	ppm
NAPHTHALENE	91-20-3	ACGIH	TWA	10	ppm
NAPHTHALENE	91-20-3	OSHA	TWA	10	ppm
TOLUENE	108-88-3	OSHA	С	300	ppm
TOLUENE	108-88-3	NIOSH	STEL	150	ppm
TOLUENE	108-88-3	ACGIH	TWA	50	ppm
TOLUENE	108-88-3	OSHA	TWA	200	ppm
XYLENE	1330-20-7	ACGIH	STEL	150	ppm
XYLENE	1330-20-7	ACGIH	TWA	100	ppm
XYLENE	1330-20-7	OSHA	TWA	100	ppm
LIGHT PETROLEUM DISTILLATE	8006-61-9	ACGIH	STEL	500	ppm
LIGHT PETROLEUM DISTILLATE	8006-61-9	ACGIH	TWA	300	ppm

## REGULAR UNLEADED GASOLINE

Section 3	Fire and	Explosion	Hazard of	Product
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Section 5 The 8	and Explosion mazard or Froduct
MEANS OF EXTINCTION	Danger! Extremely flammable liquid! Vapors may explode! Use dry chemical, foam or carbon dioxide to extinguish fire. Use water spray to disperse gas or vapor and to protect personnel attempting to stop a leak. Use water to flush spills away from sources of ignition. Do not flush down public sewers.
FLASHPOINT & METHOD OF DETERMINATION UPPER EXPLOSION LIMIT (% BY VOL.) LOWER EXPLOSION LIMIT (% BY VOL.) AUTO-IGNITION TEMPERATURE HAZARDOUS COMBUSTION PRODUCTS EXPLOSION DATA	-37.00°C (-35°F) TCC 7.6 1.4 .444.00°C (833°F)
SENSITIVITY TO STATIC DISCHARGE	decomposition. Dangerous when exposed to heat or explosion hazard. Runoff to sewer may cause fire or explosion. Containers may explode in heat of fire.  N/A.

#### Hazards Ratings:

2

3

**HMIS** 

Ney. 0 - 16	Key. U = least, T = slight, Z = moderate, 3 = nigh, 4 = extreme				
	Ŀ	<u>lealth</u>	<u>Fire</u>	Reactivity	PPI
NFPA	1	1	3	0	

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Section	on 4 First Aid Measures
SPECIFIC FIRST AID PROCEDURES	
SKIN CONTACT	Remove contaminated clothing immediately. Wash area of contact thoroughly with soap and water. Get medical attention if irritation persists. High pressure injections are serious medical emergencies. Get immediate medical attention.
INGESTION	DO NOT INDUCE VOMITING BECAUSE OF DANGER OF  ASPIRATING LIQUID INTO LUNGS. Get immediate medical attention.  If spontaneous vomiting occurs, monitor for breathing difficulty.
INHALATION	Remove affected person from source of exposure. If not breathing ensure open airway and institute CPR. If breathing is difficult, administer oxygen if available. Get medical attention.
EYE CONTACT	Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from eyeball to ensure thorough rinsing. Get medical attention if irritation persists.

#### Section 5 Fire Fighting Measures

#### EXTINGUISHING MEDIA

The following media may be used to extinguish a fire involving this material: Water spray; Regular foam; Dry chemical; Carbon dioxide;

#### FIRE FIGHTING INSTRUCTIONS

Use water spray to cool fire exposed tanks and containers. Wear structural fire fighting gear. As in any fire, wear selfcontained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

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Section 5 Fire Fighting Measures (continued)

#### **FLAMMABLE PROPERTIES**

	Typical	Minimum	Maximum	Text Result	Units	Method
Flash Point				-40 ESTIMATED	F	N/A
Autoignition Temperature				750 ESTIMATED	F	N/A
Lower Explosion Limit	1.5				%	N/A
Upper Explosion Limit	7.6		1		%	N/A

#### Section 6 Accidental Release Measures

#### ACTIVATE FACILITY SPILL CONTINGENCY or EMERGENCY PLAN

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction: stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater. Professional assistance may be necessary to determine the extent of subsurface impact.

Carefully contain and stop the source of the spill, if it is safe to do so. Protect bodies of water by diking, absorbents or absorbent boom. Do not flush down sewer or drainage system. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or area/equipment that require protection.

Take up with sand or other absorbent materials. Carefully shovel or sweep up into a waste container for reclamation or disposal use caution because flammable vapors may accumulate in closed containers.

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see section 8)

#### Section 7 Handling and Storage

#### HANDLING

Use only in a well-ventilated area. Ground and bond containers when transferring material. NFPA class IA storage. Flash point is less than 73 degrees F and boiling point is less than 100 degrees F. Avoid breathing (dust, vapor, mist, gas). Avoid prolonged or repeated contact with skin. Avoid contact with eyes, Wash thoroughly after handling. Never siphon by mouth.

#### STORAGE

Keep away from heat, sparks, and flame. Keep container closed when not in use. Consult NFPA and / or OSHA codes for additional information.

#### Section 8 Exposure Controls and Personal Protection

Consult With a Health and Safety Professional for Specific Selections

#### **ENGINEERING CONTROLS**

Use with adequate ventilation. Use explosion-proof ventilation equipment.

#### PERSONAL PROTECTION

#### **EYE PROTECTION**

Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).

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Section 8 Exposure Controls and Personal Protection (continued)

#### GLOVES or HAND PROTECTION

The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection. Protective gloves are recommended to protect against contact with product. Polyethylene; Neoprene; Nitrile; Polyvinyl alcohol; Viton;

#### RESPIRATORY PROTECTION

Concentration in air determines the level of respiratory protection needed. Use only NIOSH certified respiratory equipment. Half-mask air purifying respirator with organic vapor cartridges is acceptable for exposures to ten (10) times the exposure limit. Full-face air purifying respirator with organic vapor cartridges is acceptable for exposures to fifty (50) times the exposure limit. Exposure should not exceed the cartridge limit of 1000 ppm. Protection by air purifying respirators is limited. Use a positive pressure-demand full-face supplied air respirator or SCBA for exposures greater than fifty (50) times the exposure limit. If exposure is above the IDLH (Immediately Dangerous to Life and Health) or there is the possibility of an uncontrolled release, or exposure levels are unknown, then use a positive pressure-demand full-face supplied air respirator with escape bottle or SCBA. Wear a NIOSH-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

#### OTHER

Where splashing is possible, full chemically resistant protective clothing (e.g., acid suit) and boots are required. The following materials are acceptable for use as protective clothing: Polyvinyl alcohol (PVA); Polyethylene; Neoprene; Nitrile; Viton; Polyurethane; Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Remove contaminated clothing and wash before reuse. For non-fire emergencies, positive pressure SCBA and structural firefighter's protective clothing will provide only limited protection.

#### Section 9 Physical /Chemical Properties

PHYSICAL STATE	Not determined
ODOUR AND APPEARANCE	Clear liquid with a strong hydrocarbon odor
ODOUR THRESHOLD	Not Determined
SPECIFIC GRAVITY	0.72 - 0.74 @ 60°F
VAPOUR PRESSURE	760.00 MM HG @ 100°F
VAPOUR DENSITY (air=1)	1.2 as Vapor
EVAPORATION RATE	(Water = 1); >1
BOILING POINT	13.0°C (55°F)
FREEZING POINT	Not determined
pH	Not determined
COEFFICIENT OF WATER/OIL DISTRIBUTION	Negligible
% VOLATILE	100 % by weight

#### Section 10 Stability and Reactivity Data

CHEMICAL STABILITY	Stable	
INCOMPATIBLE MATERIALS	Avoid contact with strong oxidizers.	
CONDITIONS TO AVOID	Avoid heat, sparks, and open flame	•
CONDITIONS OF REACTIVITY	Stable under normal conditions.	
HAZARDOUS DECOMPOSITION PRODUCTS	Combustion may produce CO, CO2 and reactive hydrocarbons	

#### Section 11 Toxicological Information

#### POTENTIAL HEALTH EFFECTS

#### PRE-EXISTING MEDICAL CONDITIONS

The following diseases or disorders may be aggravated by exposure to this product: Skin; Eye; Blood forming organs; Nervous system, Respiratory system; Lung (asthma-like conditions); Cardiovascular system,

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#### Section 11 Toxicological Information (continued)

#### INHALATION

High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis and loss of consciousness and even death). Excessive exposure to mists or vapors generated by heat may cause irritation to eyes, nose, throat, lungs and respiratory tract. Repeated excessive exposures may cause blood disorders such as anemia and leukemia. Contains a material that has been related to cancer in humans.

LC50 (mg/l):

no data

LC50 (mg/m3):

no data

LC50 (ppm):

no data

#### SKIN

Moderately irritating to the skin. Skin absorption of material may produce systemic toxicity. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

Draize Skin Score:

4.8 Out of 8.0

LD50 (mg/kg):

no data

#### EYES

Moderately irritating to the eyes.

#### INGESTION

Product may be harmful or fatal if swallowed. Pulmonary aspiration hazard. After ingestion, may enter lungs and produce damage. Irritating to mouth, throat, and stomach.

LD50 (g/kg):

no data

#### Section 12 Ecological Information

Keep out of sewers, drainage areas, and waterways. Report spills and releases under Federal and State regulations.

#### Section 13 Disposal Considerations

This substance, when discarded or disposed of, is not specifically listed as a hazardous waste in Federal regulations; however it could be hazardous if it is considered toxic, corrosive, ignitable, or reactive according to Federal definitions.

#### Section 14 Transportation Information

SPECIAL SHIPPING INFORMATION..... Ground lines and equipment used during transfer to reduce the possibility of static soaked-initiated fire or explosion

#### Section 15 Regulatory Information

#### US FEDERAL, STATE, and LOCAL REGULATORY INFORMATION

This product and it's constituents listed herein are on the EPA TSCA Inventory. Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and or local reporting requirements. This product and/or it's constituents may also be subject to other federal, state, or local regulations. Consult the regulations applicable to your facility/operation.

#### CLEAN WATER ACT (OIL SPILLS)

Any spill or release of this product to navigable waters or adjoining shorelines sufficient to cause any visible sheen or deposit of a sludge or emulsion must be reported immediately to the National Resource Center (1-800-424-8802) or, if not practical, the U.S.

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Section 15 Regulatory Information (continued)

Coast Guard with follow-up to the National Response Center as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies as required.

#### CERCLA SECTON 103 and SARA SECTION 304 (RELEASE TO THE ENVIRONMENT)

The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts crude oil, refined, and unrefined petroleum products and any indigenous components of such. However, other federal reporting requirements (e.g. SARA Section 304 as well as the Clean Water Act, if the spill occurs on navigable waters) may still apply.

#### SARA SECTION 311/312 - HAZARD CLASSES

ACUTE HEALTH	CHRONIC HEALTH	FIRE	SUDDEN RELEASE OF PRESSURE	REACTIVE
X	X	X		

Regulatory List	Component	CAS No.
ACGIH - Occupational Exposure Limits - Carcinogens	BENZENE	71-43-2
ACGIH - Occupational Exposure Limits - Carcinogens	ETHYL BENZENE	100-41-4
ACGIH - Occupational Exposure Limits - Carcinogens	NAPHTHALENE	91-20-3
ACGIH - Occupational Exposure Limits - Carcinogens ACGIH - Occupational Exposure Limits - Carcinogens	TOLUENE	108-88-3
ACGIH - Occupational Exposure Limits - Carcinogens ACGIH - Occupational Exposure Limits - Carcinogens	XYLENE	1330-20-7
ACGIH - Occupational Exposure Limits - Cardingers  ACGIH - Occupational Exposure Limits - TWAs	BENZENE	71-43-2
ACGIH - Occupational Exposure Limits - TWAs	CUMENE	98-82-8
ACGIH - Occupational Exposure Limits - TWAS	CYCLOHEXANE	110-82-7
ACGIH - Occupational Exposure Limits - TWAs	ETHYL BENZENE	100-41-4
	N-HEXANE	110-54-3
ACCIH - Occupational Exposure Limits - TWAs	NAPHTHALENE	91-20-3
ACGIH - Occupational Exposure Limits - TWAs	TOLUENE	108-88-3
ACGIH - Occupational Exposure Limits - TWAs	XYLENE	1330-20-7
ACGIH - Occupational Exposure Limits - TWAs	BENZENE	71-43-2
ACGIH - Short Term Exposure Limits		100-41-4
ACGIH - Short Term Exposure Limits	ETHYL BENZENE	8006-61-9
ACGIH - Short Term Exposure Limits	LIGHT PETROLEUM DISTILLATE	8006-61-9
ACCUL Chart Tarre Francisco Linette	NAPHTHALENE	91-20-3
ACCILL Short Term Exposure Limits	XYLENE	1330-20-7
ACGIH - Short Term Exposure Limits	BENZENE	71-43-2
ACGIH - Skin Absorption Designation		
ACGIH - Skin Absorption Designation	N-HEXANE	110-54-3
ACGIH - Skin Absorption Designation	NAPHTHALENE	91-20-3
ACGIH - Skin Absorption Designation	TOLUENE	108-88-3
CAA (Clean Air Act) - HON Rule - Organic HAPs	BENZENE	71-43-2
CAA (Clean Air Act) - HON Rule - Organic HAPs	CUMENE	98-82-8
CAA (Clean Air Act) - HON Rule - Organic HAPs	ETHYL BENZENE	100-41-4
CAA (Clean Air Act) - HON Rule - Organic HAPs	N-HEXANE	110-54-3
CAA (Clean Air Act) - HON Rule - Organic HAPs	NAPHTHALENE	91-20-3
CAA (Clean Air Act) - HON Rule - Organic HAPs	TOLUENE	108-88-3
CAA (Clean Air Act) - HON Rule - Organic HAPs	XYLENE	1330-20-7
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	BENZENE	71-43-2
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	CUMENE	98-82-8
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	CYCLOHEXANE	110-82-7
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	ETHYL BENZENE	100-41-4
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	N-HEXANE	110-54-3
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	NAPHTHALENE	91-20-3
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	TOLUENE	108-88-3
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	XYLENE	1330-20-7

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### Section 15 Regulatory Information (continued)

CAA - 1990 Hazardous Air Pollutants	DENZENE	71 43 3
	BENZENE	71-43-2
CAA - 1990 Hazardous Air Pollutants	CUMENE	98-82-8
CAA - 1990 Hazardous Air Pollutants	ETHYL BENZENE	100-41-4
CAA - 1990 Hazardous Air Pollutants	N-HEXANE	110-54-3
CAA - 1990 Hazardous Air Pollutants	NAPHTHALENE	91-20-3
CAA - 1990 Hazardous Air Pollutants	TOLUENE	108-88-3
CAA - 1990 Hazardous Air Pollutants	XYLENE	1330-20-7
Canada - WHMIS - Ingredient Disclosure	1,2,4-TRIMETHYLBENZENE	95-63-6
Canada - WHMIS - Ingredient Disclosure	BENZENE	71-43-2
Canada - WHMIS - Ingredient Disclosure	CUMENE	98-82-8
Canada - WHMIS - Ingredient Disclosure	CYCLOHEXANE	110-82-7
Canada - WHMIS - Ingredient Disclosure	ETHYL BENZENE	100-41-4
Canada - WHMIS - Ingredient Disclosure	LIGHT PETROLEUM	8006-61-9
Carlada - Whivito - Ingredient Disclosure		0000-01-3
0 1 148,040 1 5 4 D' -1	DISTILLATE	440 54 0
Canada - WHMIS - Ingredient Disclosure	N-HEXANE	110-54-3
Canada - WHMIS - Ingredient Disclosure	NAPHTHALENE	91-20-3
Canada - WHMIS - Ingredient Disclosure	TOLUENE	108-88-3
CERCLA/SARA - Haz Substances and their RQs	BENZENE	71-43-2
CERCLA/SARA - Haz Substances and their RQs	BENZENE	71-43-2
CERCLA/SARA - Haz Substances and their RQs	CUMENE	98-82-8
CERCLA/SARA - Haz Substances and their RQs	CUMENE	98-82-8
CERCLA/SARA - Haz Substances and their RQs	CYCLOHEXANE	110-82-7
CERCLA/SARA - Haz Substances and their RQs	CYCLOHEXANE	110-82-7
CERCLA/SARA - Haz Substances and their RQs	ETHYL BENZENE	100-41-4
CERCLA/SARA - Haz Substances and their RQs	ETHYL BENZENE	100-41-4
CERCLA/SARA - Haz Substances and their RQs	N-HEXANE	110-54-3
CERCLA/SARA - Haz Substances and their RQs	N-HEXANE	110-54-3
CERCLA/SARA - Haz Substances and their RQs	NAPHTHALENE	91-20-3
CERCLA/SARA - Haz Substances and their RQs	NAPHTHALENE	91-20-3
CERCLA/SARA - Haz Substances and their RQs	TOLUENE	108-88-3
CERCLA/SARA - Haz Substances and their RQs	TOLUENE	108-88-3
CERCLA/SARA - Haz Substances and their RQs	XYLENE	1330-20-7
CERCLA/SARA - Haz Substances and their RQs	XYLENE	1330-20-7
	1,2,4-TRIMETHYLBENZENE	95-63-6
CERCLA/SARA - Section 313 - Emission Reporting	BENZENE	71-43-2
CERCLA/SARA - Section 313 - Emission Reporting	CUMENE	98-82-8
CERCLA/SARA - Section 313 - Emission Reporting		
CERCLA/SARA - Section 313 - Emission Reporting	CYCLOHEXANE	110-82-7
CERCLA/SARA - Section 313 - Emission Reporting	ETHYL BENZENE	100-41-4
CERCLA/SARA - Section 313 - Emission Reporting	N-HEXANE	110-54-3
CERCLA/SARA - Section 313 - Emission Reporting	NAPHTHALENE	91-20-3
CERCLA/SARA - Section 313 - Emission Reporting	TOLUENE	108-88-3
CERCLA/SARA - Section 313 - Emission Reporting	XYLENE	1330-20-7
CWA (Clean Water Act) - Hazardous Substances	BENZENE	71-43-2
CWA (Clean Water Act) - Hazardous Substances	CYCLOHEXANE	110-82-7
CWA (Clean Water Act) - Hazardous Substances	ETHYL BENZENE	100-41-4
CWA (Clean Water Act) - Hazardous Substances	NAPHTHALENE	91-20-3
CWA (Clean Water Act) - Hazardous Substances	TOLUENE	108-88-3
CWA (Clean Water Act) - Hazardous Substances	XYLENE	1330-20-7
CWA (Clean Water Act) - Priority Pollutants	BENZENE	71-43-2
CWA (Clean Water Act) - Priority Pollutants	ETHYL BENZENE	100-41-4
CWA (Clean Water Act) - Priority Pollutants	NAPHTHALENE	91-20-3
CWA (Clean Water Act) - Priority Pollutants	TOLUENE	108-88-3



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#### Section 15 Regulatory Information (continued)

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	CWA (Clean Water Act) - Toxic Pollutants	BENZENE	71-43-2
	CWA (Clean Water Act) - Toxic Pollutants	ETHYL BENZENE	100-41-4
	CWA (Clean Water Act) - Toxic Pollutants	NAPHTHALENE	91-20-3
	CWA (Clean Water Act) - Toxic Pollutants	TOLUENE	108-88-3
	IARC - Group 1 (carcinogenic to humans)	BENZENE	71-43-2
	IARC - Group 2B (Possibly carcinogenic to humans)	ETHYL BENZENE	100-41-4
	IARC - Group 2B (Possibly carcinogenic to humans)	LIGHT PETROLEUM	8006-61-9
		DISTILLATE	
	IARC - Group 2B (Possibly carcinogenic to humans)	NAPHTHALENE	91-20-3
	IARC - Group 3 (not classifiable)	TOLUENE	108-88-3
	IARC - Group 3 (not classifiable)	XYLENE	1330-20-7
	Inventory - Canada - Domestic Substances List	1,2,4-TRIMETHYLBENZENE	95-63-6
	Inventory - Canada - Domestic Substances List	BENZENE	71-43-2
	Inventory - Canada - Domestic Substances List	CUMENE	98-82-8
	Inventory - Canada - Domestic Substances List	CYCLOHEXANE	110-82-7
	Inventory - Canada - Domestic Substances List	ETHYL BENZENE	100-41-4
	Inventory - Canada - Domestic Substances List	LIGHT PETROLEUM	8006-61-9
		DISTILLATE	
	Inventory - Canada - Domestic Substances List	N-HEXANE	110-54-3
	Inventory - Canada - Domestic Substances List	NAPHTHALENE	91-20-3
	Inventory - Canada - Domestic Substances List	TOLUENE	108-88-3
	Inventory - Canada - Domestic Substances List	XYLENE	1330-20-7
	Inventory - TSCA - Sect. 8(b) Inventory	1,2,4-TRIMETHYLBENZENE	95-63-6
	Inventory - TSCA - Sect. 8(b) Inventory	BENZENE	71-43-2
	Inventory - TSCA - Sect. 8(b) Inventory	CUMENE	98-82-8
	Inventory - TSCA - Sect. 8(b) Inventory	CYCLOHEXANE	110-82-7
	Inventory - TSCA - Sect. 8(b) Inventory	ETHYL BENZENE	100-41-4
	Inventory - TSCA - Sect. 8(b) Inventory	LIGHT PETROLEUM	8006-61-9
	A 40 1 400 II	DISTILLATE	
	Inventory - TSCA - Sect. 8(b) Inventory	N-HEXANE	110-54-3
	Inventory - TSCA - Sect. 8(b) Inventory	NAPHTHALENE	91-20-3
	Inventory - TSCA - Sect. 8(b) Inventory	TOLUENE	108-88-3
	Inventory - TSCA - Sect. 8(b) Inventory	XYLENE	1330-20-7
	OSHA - Final PELs - Ceiling Limits	BENZENE	71-43-2
	OSHA - Final PELs - Ceiling Limits	TOLUENE	108-88-3
	OSHA - Final PELs - Skin Notations	CUMENE	98-82-8
	OSHA - Final PELs - Time Weighted Averages	BENZENE	71-43-2
	OSHA - Final PELs - Time Weighted Averages	CUMENE	98-82-8
	OSHA - Final PELs - Time Weighted Averages	CYCLOHEXANE	110-82-7
	OSHA - Final PELs - Time Weighted Averages	ETHYL BENZENE	100-41-4
	OSHA - Final PELs - Time Weighted Averages	N-HEXANE	110-54-3
	OSHA - Final PELs - Time Weighted Averages	NAPHTHALENE	91-20-3
	OSHA - Final PELs - Time Weighted Averages	TOLUENE	108-88-3
	OSHA - Final PELs - Time Weighted Averages	XYLENE	1330-20-7
	OSHA - Regulated Carcinogens	BENZENE	71-43-2
	OSHA - Select Carcinogens	BENZENE	71-43-2
	Pennsylvania - RTK (Right to Know) List	1,2,4-TRIMETHYLBENZENE	95-63-6
	Pennsylvania - RTK (Right to Know) List	BENZENE	71-43-2
	Pennsylvania - RTK (Right to Know) List	CUMENE	98-82-8
	Pennsylvania - RTK (Right to Know) List	CYCLOHEXANE	110-82-7

#### Section 15 Regulatory Information (continued)

Pennsylvania - RTK (Right to Know) List	THYL BENZENE	100-41-4
Pennsylvania - RTK (Right to Know) List	N-HEXANE	110-54-3
Pennsylvania - RTK (Right to Know) List	NAPHTHALENE	91-20-3
Pennsylvania - RTK (Right to Know) List	TOLUENE	108-88-3
Pennsylvania - RTK (Right to Know) List	XYLENE	1330-20-7
Pennsylvania - RTK - Special Hazardous Substances	BENZENE	71-43-2
TSCA - Sect. 12(b) - Export Notification	CYCLOHEXANE	110-82-7
TSCA - Sect. 12(b) - Export Notification	N-HEXANE	110-54-3
TSCA - Section 8(a) - PAIR Reporting List	NAPHTHALENE	91-20-3

#### Section 16 Other Information

Precautionary labeling for pumps, portable containers, and drums is required. A "hazardous when empty" pictogram and D.O.T. flammable liquid label are also required for drums. Details available upon request. Because benzene is present in this product above 0.1%, the OSHA Standard for benzene is applicable to work locations upstream of final discharge from terminals. Consult 29CFR1910.1028 for details. Prolonged and repeated excessive exposures to benzene can result in blood disorders ranging from anemia to leukemia. Sun recommends that exposures to benzene be kept below 1.0 ppm for 8-hours; 5.0 ppm for 15-min. Normal service station operations are below these values. For use as motor fuel only. Do not use for any other purpose. Catecholamines and similar adrenergic drugs are generally contraindicated because of potential for increased sensitivity of the heart from hydrocarbon overexposure and subsequent ventricular fibrillation. EKG monitoring may be indicated and bronchodilators should be selected with care. Following injection, prompt debridement of the wound is necessary to minimize necrosis and tissue loss. COMPONENT TOXICITY: Overexposure to naphthalene, a minor component of this product, may cause skin, eye and respiratory tract irritation, anemia, loss of vision, nervous system effects and kidney and thymus damage. Also, exposure to naphthalene has produced "respiratory tract" tumors in laboratory animals.

#### Preparation Date of Material Safety Data Sheet

DATE PREPARED	03/06/96
REVISION DATE	08/20/04

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Protective Clothing

TDG (pictograms)

Section 1. Chemical Product and Company Identification **Product Name** W104, W293 DIESEL FUEL Code SAP: 120, 121, 122, 287 Validated on 2/6/2004. Diesel 50, Diesel 50 LS, #1 Diesel , #1 Diesel LS, Diesel LC, Seasonal Diesel, Synonym Seasonal Diesel LS, Diesel AA, Domestic Marine Diesel, International marine Diesel, Seasonal Diesel Locomotive, Domestic Marine diesel LS, diesel -20°C (LS), LSD, Low Sulphur Diesel, dyed diesel, marked diesel, coloured diesel, Naval Distillate, Ultra Low Sulphur Diesel, ULS Diesel, Mining Diesel, Mining Diesel Special, Mining Diesel Special LS, High Flash Mining Diesel, Furnace Oil, Stove Oil. Petro-Canada: 403-296-3000 PETRO-CANADA In case of Manufacturer Canutec Transportation: P.O. Box 2844 Emergency 613-996-6666 Calgary, Alberta T2P 3E3 Poison Control Centre: Consult local telephone directory for **Material Uses** Diesel fuels are distillate fuels suitable for use in high and medium speed emergency number(s). internal combustion engines of the compression ignition type. Mining Diesel

	- Alexander - Company			Exp	posure Limits (ACGIH)	
	Name	CAS#	% (V/V)	TLV-TWA(8 h)	STEL	CEILING
1) Diesel oil.		68334-30-5	>99.9	100 mg/m³ (as total hydrocarbons) *	Not established	Not established
2) Proprietary additives.		Not available	<0.1	Not established	Not established	Not established
Aromatic content is 50 Sulphur content is 0-0.	% maximum (benzene: nil). 50%.					
Manufacturer Recommendation	* Avoid prolonged or repeated an increased risk of skin cance		esel fuels whi	ch can lead to dermal	irritation and may b	be associated wi
Other Exposure Limits	Consult local, state, provincial	or territory authoriti	es for accepta	able exposure limits.		

has a higher flash point requirement, for safe use in underground mines.

Section 3. Haza	Section 3. Hazards Identification.				
Potential Health Effects	Combustible liquid. Exercise caution when handling this material. Contact with this product may cause skin and eye irritation. Prolonged or repeated contact may cause skin irritation, defatting, drying and dermatitis. Inhalation of this product may cause respiratory tract irritation and Central Nervous System (CNS) Depression, symptoms of which may include; weakness, dizziness, slurred speech, drowsiness, unconsciousness and in cases of severe overexposure; come and death. Ingestion of this product may cause gastro-intestinal irritation. Aspiration of this product may result in severe irritation or burns to the respiratory tract. For more information refer to Section 11 of this MSDS.				

Section 4. First A	id Measures
Eye Contact	IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek medical attention.
Skin Contact	Remove contaminated clothing - launder before reuse. Wash gently and thoroughly the contaminated skin with running water and non-abrasive soap. Seek medical attention.
Inhalation	Evacuate the victim to a safe area as soon as possible. If the victim is not breathing, perform artificial respiration. Allow the victim to rest in a well ventilated area. Seek medical attention.
Ingestion	DO NOT induce vomiting because of danger of aspirating liquid into lungs. Seek medical attention.
Note to Physician	Not available

DIESEL FUEL		Page Number: 2

Flammability	Class II - combustible liquid (NFPA).	Flammable Limits	LOWER: 0.7%, UPPER: 6% (NFPA)		
Flash Points	Diesel Fuel: Closed Cup: >40°C (>104°F) Marine Diesel Fuel: Closed Cup: >60°C (>140°F) Mining Diesel: Closed Cup: 52°C (126°F)	Auto-Ignition Temperature	225°C (437°F)		
Fire Hazards in Presence of Various Substances	Flammable in presence of open flames, sparks, or heat. Vapours are heavier than air and may travel considerable distance to sources of ignition and flash back. This product can accumulate static charge and ignite. May accumulate in confined spaces.	Explosion Hazards in Presence of Various Substances	Containers may explode in heat of fire. Do not cut, weld, heat, drill or pressurize empty container. Vapour explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.		
Products of Combustion	Carbon oxides (CO, CO2), nitrogen oxides (NOx), smoke and irritating vapours as products of incomp See Section 11 (Other Considerations) for informat	lete combustion.			
Fire Fighting Media and Instructions	NAERG96, GUIDE 128, Flammable liquids (Non-polar/Water-immiscible).  CAUTION: This product has a moderate flash point above 40°C: Use of water scray when fighting fire may be inefficient.  If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions.				
	SMALL FIRES: Dry chemical, CO2, water spray or regular foam.  LARGE FIRES: Water spray, fog or regular foam. Do not use straight streams. Move containers from fire area if you can do it without risk.  Fires Involving Tanks or Car/Trailer Loads: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.				
	Cool containers with flooding quantities of water unfrom venting devices or any discolouration of tank unmanned hose holders or monitor nozzles; if the pressure self-contained breathing apparatus (SCE protection.	<ul> <li>ALWAYS stay awa is is impossible with</li> </ul>	by from the ends of tanks. For massive fire, use draw from area and let fire burn. Wear positive		

Section	6	Accidental	Rolossa	Mossures
Section	v.	Accidental	Release	Measures

#### Material Release or Spill

Consult current National Emergency Response Guide Book (NAERG) for appropriate spill measures if necessary. IN THE EVENT OF A LARGE SPILL CONSIDER THE FOLLOWING CONTROL MEASURES: Extinguish all ignition sources. Stop leak if safe to do so. Ventilate area. Dike spilled material. Use appropriate inert absorbent material to absorb spilled product. Collect used absorbent for later disposal. Avoid contact with spilled material. Avoid breathing vapours or mists of material. Avoid contaminating sewers, streams, rivers and other water courses with spilled material. Evacuate non-essential personnel. Ensure clean-up personnel wear appropriate personal protective equipment. Ground and bond all equipment used to clean up the spilled material, as it may be a static accumulator. Notify appropriate authorities immediately.

Section 7. H	Section 7. Handling and Storage		
Handling	COMBUSTIBLE MATERIAL. Handle with care. Avoid contact with any sources of ignition, flames, heat, and sparks. Avoid skin contact. Avoid eye contact. Avoid inhalation of product vapours or mists. Empty containers may contain product residue. Do not pressurize, cut, heat, or weld empty containers. Do not reuse containers without commercial cleaning and/or reconditioning. Personnel who handle this material should practice good personal hygiene during and after handling to help prevent accidental ingestion of this product. Properly dispose of contaminated leather articles including shoes that cannot be decontaminated. Avoid confined spaces and areas with poor ventilation. Ensure all equipment is grounded/bonded. Wear proper personal protective equipment (See Section 8).		
Storage	Store away from heat and sources of ignition. Store in dry, cool, well-ventilated area. Store away from incompatible and reactive materials (See section 5 and 10). Ensure the storage containers are grounded/bonded.		

#### Section 8. Exposure Controls/Personal Protection

Engineering Controls For normal application, special ventilation is not necessary. If user's operations generate vapours or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Make-up air should always be supplied to balance air removed by exhaust ventilation. Ensure that eyewash station and safety shower are close to work-station.

### Personal Protection - The selection of personal protective equipment varies, depending upon conditions of use.

Eyes Eye protection (i.e., safety glasses, safety goggles and/or face shield) should be determined based on conditions of use. If product is used in an application where splashing may occur, the use of safety goggles and/or a face shield should be

Body Wear appropriate clothing to prevent skin contact. As a minimum long sleeves and trousers should be worn.

Respiratory Where concentrations in air may exceed the occupational exposure limits given in Section 2 (and those applicable to your area) and where engineering, work practices or other means of exposure reduction are not adequate, NIOSH approved respirators may be necessary to prevent overexposure by inhalation.

Hands Wear appropriate chemically protective gloves. When handling hot product ensure gloves are heat resistant and insulated.

Feet Wear appropriate footwear to prevent product from coming in contact with feet and skin.

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Section 9. Physi	cal and Chemical Properties		
Physical State and Appearance	Bright oily liquid.	Viscosity	1.3 - 4.1 cSt @ 40°C (104°F)
Colour	Clear to yellow / brown (may be dyed for taxation purposes).	Pour Point	Variable, -50°C to 0°C (-58°F to -32°F)
Odour	Petroleum oil like.	Softening Point	Not applicable.
Odour Threshold	Not available	Dropping Point	Not applicable.
Boiling Point	150 - 371°C (302-700°F)	Penetration	Not applicable.
Density	0.80 - 0.85 kg/L @ 15°C (59°F)	Oil / Water Dist. Coefficient	Not available
Vapour Density	4.5 (Air = 1)	Ionicity (in water)	Not applicable.
Vapour Pressure	Not available	Dispersion Properties	Not available
Volatility	Semivolatile to volatile.	Solubility	Insoluble in cold water, soluble in non-polar hydrocarbon solvents.

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Corrosivity	Not available			
Stability	The product is stable under normal handling and storage conditions.	Hazardous Polymerization	Will not occur under normal working conditions.	
Incompatible Substances / Conditions to Avoid	Reactive with oxidizing agents and acids.	Decomposition Products	May release COx, NOx, SOx, H2S, H2O, smoke and irritating vapours when heated to decomposition.	

Routes of Entry	Skin contact, eye contact, inhalation, and ingestion.		
Acute Lethality	Acute oral toxicity (LD50): 7500 mg/kg (rat).		
Chronic or Other Toxic Effects Dermal Route:	This product contains a component (at >= 1%) that can cause skin irritation. Therefore, this product is considered to be a skin irritant. Prolonged or repeated contact may defat and dry skin, and cause dermatitis. (See Other Considerations)		
Inhalation Route:	Inhalation of this product may cause respiratory tract irritation. Inhalation of this product may cause Central Nervous System (CNS) Depression, symptoms of which may include; weakness, dizziness, slurred speech, drowsiness, unconsciousness and in cases of severe overexposure; coma and death.		
Oral Route:	Ingestion of this product may cause gastro-intestinal irritation. Aspiration of this product may result in severe irritation or burns to the respiratory tract. Ingestion of this product may cause Central Nervous System (CNS) Depression, symptoms of which may include; weakness, dizziness, slurred speech, drowsiness, unconsciousness and in cases of severe overexposure; coma and death.		
Eye Irritation/Inflammation: This product contains a component (at >= 1%) that can cause eye irritation. Therefore considered to be an eye irritant.			
Immunotoxicity:	Not available		
Skin Sensitization:	Contact with this product is not expected to cause skin sensitization, based upon the available data and the known hazards of the components.		
Respiratory Tract Sensitization:	Contact with this product is not expected to cause respiratory tract sensitization, based upon the available data and the known hazards of the components.		
Mutagenic:	This product is not known to contain any components at >= 0.1% that have been shown to cause mutagenicity. Therefore, based upon the available data and the known hazards of the components, this product is not expected to be a mutagen.		
Reproductive Toxicity:	This product is not known to contain any components at >= 0.1% that have been shown to cause reproductive toxicity. Therefore, based upon the available data and the known hazards of the components, this product is not expected to be a reproductive toxin.		
Teratogenicity/Embryotoxicity:	This product is not known to contain any components at >= 0.1% that have been shown to cause teratogenicity and/or embryotoxicity. Therefore, based upon the available data and the known hazards of the components, this product is not expected to be a teratogen/embryotoxin.		
Carcinogenicity (ACGIH): ACGIH A3: animal carcinogen. [Diesel oil] (See Other Considerations)			
Carcinogenicity (IARC):	This product is not known to contain any chemicals at reportable quantities that are listed as Group 1, 2A, or 2B carcinogens by IARC.		
Carcinogenicity (NTP):	This product is not known to contain any chemicals at reportable quantities that are listed as carcinogens by NTP.		
Carcinogenicity (IRIS):	This product is not known to contain any chemicals at reportable quantities that are listed as carcinogens by IRIS.		
Continued on Next Page	Internet: www.petro-canada.calmsds Available in French		

DIESEL FUEL	Page Number: 4
Carcinogenicity (OSHA):	This product is not known to contain any chemicals at reportable quantities that are listed as carcinogens by OSHA.
Other Considerations	Avoid prolonged or repeated skin contact to diesel fuels which can lead to dermal irritation and may be associated with an increased risk of skin cancer.
	Diesel engine exhaust particulate is probably carcinogenic to humans (IARC Group 2A).

Environmental Fate	Not available	Persistance/ Bioaccumulation Potential	Not available	
BOD5 and COD	Not available	Products of Biodegradation	Not available	

Section 13. Disposal Considerations		
Waste Disposal	Spent/ used/ waste product may meet the requirements of a hazardous waste. Consult your local or regional authorities. Ensure that waste management processes are in compliance with government requirements and local disposal regulations.	

Section 14. Transport Information			
TDG Classification	DIESEL FUEL, 3, UN1202, PGIII (CL-TDG)	Special Provisions for Transport	See Transportation of Dangerous Goods Regulations.

Section 15. Regu	latory Information			
Other Regulations	This product is acceptable for use under the provisions of WHMIS-CPR. All components of this formulation are listed on the CEPA-DSL (Domestic Substances List).			
	All components of this formulation are listed on the US EPA-TSCA Inventory.			
	All components of this product are on the European Inventory of Existing Commercial Chemical Substances (EINECS).			
	This product has been classified in a the MSDS contains all of the information		d criteria of the Controlled	d Products Regulations (CPR) and
	Please contact Product Safety for mo	re information.		
DSD/DPD (Europe)	Not evaluated.	HCS (U.S.A.)	CLASS: Target CLASS: Comb	
ADR (Europe) (Pictograms)	NOT EVALUATED FOR EUROPEAN TRANSPORT NON ÉVALUÉ POUR LE TRANSPORT EUROPÉEN.	DOT (U.S.A) (Pictograms)	<b>6</b>	
HMIS (U.S.A.)	Health Hazard 2*	NFPA (U.S.A.)	Fire Hazard	Rating 0 Insignificant
	Fire Hazard 2	Health	0 Reactivity	1 Slight 2 Moderate
	Reactivity 0		Specific hazard	3 High
	Personal Protection (H)		opeome nazaru	4 Extreme

Section 16	. Other Information
References	Available upon r

vailable upon request. \* Marque de commerce de Petro-Canada - Trademark

Glossary

ACGIH - American Conference of Governmental Industrial Hygienists

ADR - Agreement on Dangerous goods by Road (Europe)
ASTM - American Society for Testing and Materials (

BOD5 - Biological Oxygen Demand in 5 days CAN/CGA B149.2 Propane Installation Code

CAS - Chemical Abstract Services
CEPA - Canadian Environmental Protection Act

CERCLA - Comprehensive Environmental Response, Compensation and Liability

Act

CFR - Code of Federal Regulations

CHIP - Chemicals Hazard Information and Packaging Approved Supply List

COD5 - Chemical Oxygen Demand in 5 days CPR - Controlled Products Regulations DOT - Department of Transport

DSCL - Dangerous Substances Classification and Labeling (Europe)

IRIS - Integrated Risk Information System

LD50/LC50 - Lethal Dose/Concentration kill 50%

LDLo/LCLo - Lowest Published Lethal Dose/Concentration

NAERG'96 - North American Emergency Response Guide Book (1996) NFPA - National Fire Prevention Association

NIOSH - National Institute for Occupational Safety & Health

NPRI - National Pollutant Release Inventory

NSNR - New Substances Notification Regulations (Canada)

NTP - National Toxicology Program

OSHA - Occupational Safety & Health Administration PEL - Permissible Exposure Limit

RCRA - Resource Conservation and Recovery Act SARA - Superfund Amendments and Reorganization Act

SD - Single Dose

STEL - Short Term Exposure Limit (15 minutes)

Continued on Next Page

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DIESEL FUEL Page Number: 5 TDG - Transportation Dangerous Goods (Canada)
TDLo/TCLo - Lowest Published Toxic Dose/Concentration DSD/DPD - Dangerous Substances or Dangerous Preparations Directives (Europe) DSL - Domestic Substance List TLm - Median Tolerance Limit EEC/EU - European Economic Community/European Union EINECS - European Inventory of Existing Commercial Chemical Substances TLV-TWA - Threshold Limit Value-Time Weighted Average TSCA - Toxic Substances Control Act EPCRA - Emergency Planning and Community Right to Know Act FDA - Food and Drug Administration USEPA - United States Environmental Protection Agency USP - United States Pharmacopoeia FIFRA - Federal Insecticide, Fungicide and Rodenticide Act WHMIS - Workplace Hazardous Material Information System HCS - Hazardous Communication System HMIS - Hazardous Material Information System IARC - International Agency for Research on Cancer For Copy of MSDS Prepared by Product Safety - JDW on 2/6/2004. Internet: www.petro-canada.ca/msds Data entry by Product Safety - JDW. Western Canada, Ontario & Central Canada, telephone: 1-800-668-0220; fax: 1-800-837-1228 Quebec & Eastern Canada, telephone: 514-640-8308; fax: 514-640-8385 For Product Safety Information: (905) 804-4752

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