COMMANDER
RESOURCES LTD.
510-510 BURRARD STREET
VANCOUVER, B.C. V6C 3A8
TEL: 604-685-5254
FAX: 604-685-2814

2004-29

FACSIMILE TRANSMITTAL

TO: NWB - Phyllis Beaulieu / cc Jim Wall

FROM: Wesley Raven

FAX NO: 867-360-6369

DATE: Sept-29/04

RE: Spill Contingency Plan - Addendum
File # NWB2NAD0206/TR/G2

Number of pages including this cover page 33 *. If you do not receive all pages, please call for retransmittal.*

Message:

Please find enclosed the following:
- addendum letter (1 page)
- original letter (from Jim Wall) (2 pages)
- site map (1 page)
- MSDS sheets
  - Duron Oils (4 pages)
  - Diesel Fuel (4 pages)
  - Jet/Aviation Fuels (7 pages)
  - Gasoline (13 pages)

040929NWB2NAD Addendum Spill Plan - IMLE

COMMANDER RESOURCES LTD.

September 29, 2004

Phyllis Beaulieu
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU
X0B 1J0
Tel: (867) 360-6338
Fax: (867) 360-6369

Re: File No. NWB2NAD0206/TR/G2 – Spill Contingency Plan

Dear Ms. Beaulieu

In response to a letter from Jim Wall dated August 6, 2004, I submit the following addendum information regarding Commander Resources Ltd. "Spill Contingency Plan". Please note that all of the fuels used are stored in 205 litre (45-gallon) drums, oils are stored in 1-20 litre plastic containers. I apologize for not submitting this information sooner; our field camp is now closed for the season, effective September 11, 2004.

Point 1 – a site map is enclosed along with MSDS sheets for the materials on site.

Point 2 – The camp contact information for the site supervisor was as follows:
Tel: 604-759-0821
Fax: 604-759-0823
I can be reached at our Vancouver office at 604-685-5254 if further information is required.

Point 3 – all camp personnel were advised as to the location and use of the spill kits around the camp, helicopter pad, and drill site. The spill kit equipment was clearly marked and was positioned around camp at areas where there was the greatest potential for potential fuel spills (helicopter pad, generator shack).

Point 4 – There is help available in the Hamlet of Qikiqtarjuaq in terms of spill response supplies and heavy equipment such as loaders and dump trucks; additional personnel are available if needed.

Yours truly,

Wesley Raven

Wesley Raven
Exploration Manager
Commander Resources Ltd.

CC: Jim Wall

P.O. Box 119
GJOA HAVEN, NU X0B 1J0
TEL: (867) 360-6338
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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI

August 6, 2004 *File No: NWB2NAD0206/TR/G2*

Wesley Raven
Exploration Manager
Commander Resources Ltd.
510-510 Burrard Street
Vancouver, BC V6C 3A8
Fax: (604) 685-2814

Subject: Spill Contingency Plan –Nadluardjuk Lake Project

Dear Mr. Raven:

Please be advised that the Nunavut Water Board (NWB) has reviewed the "Spill and General Contingency Plan" (dated April 2002) which was submitted to the Board by BHP Billiton Diamonds Inc. in accordance with Part G, Item 2 of water license NWB2NAD0206, and which was assigned to Commander Resources Ltd. on May 6, 2004. Following an internal and public review of the document, only minor concerns were raised by the Department of Indian and Northern Affairs Canada (INAC). Accordingly, the Board has approved the submitted Plan (Motion # 2004-29), with the requirement that the following information be submitted as an Addendum to the approved Plan within sixty (60) days:

1. A site map which clearly indicates the location of all spill control equipment, as well as MSDS sheets;
2. The contact information for the Site Supervisor;
3. The minimum standards for training for on-site personnel, including contractor and sub-contractor personnel; and
4. An inventory of additional spill response equipment and personnel available from the Hamlet of Qikiqtarjuaq.

Please feel free to contact me at your convenience if you have questions.

Sincerely,

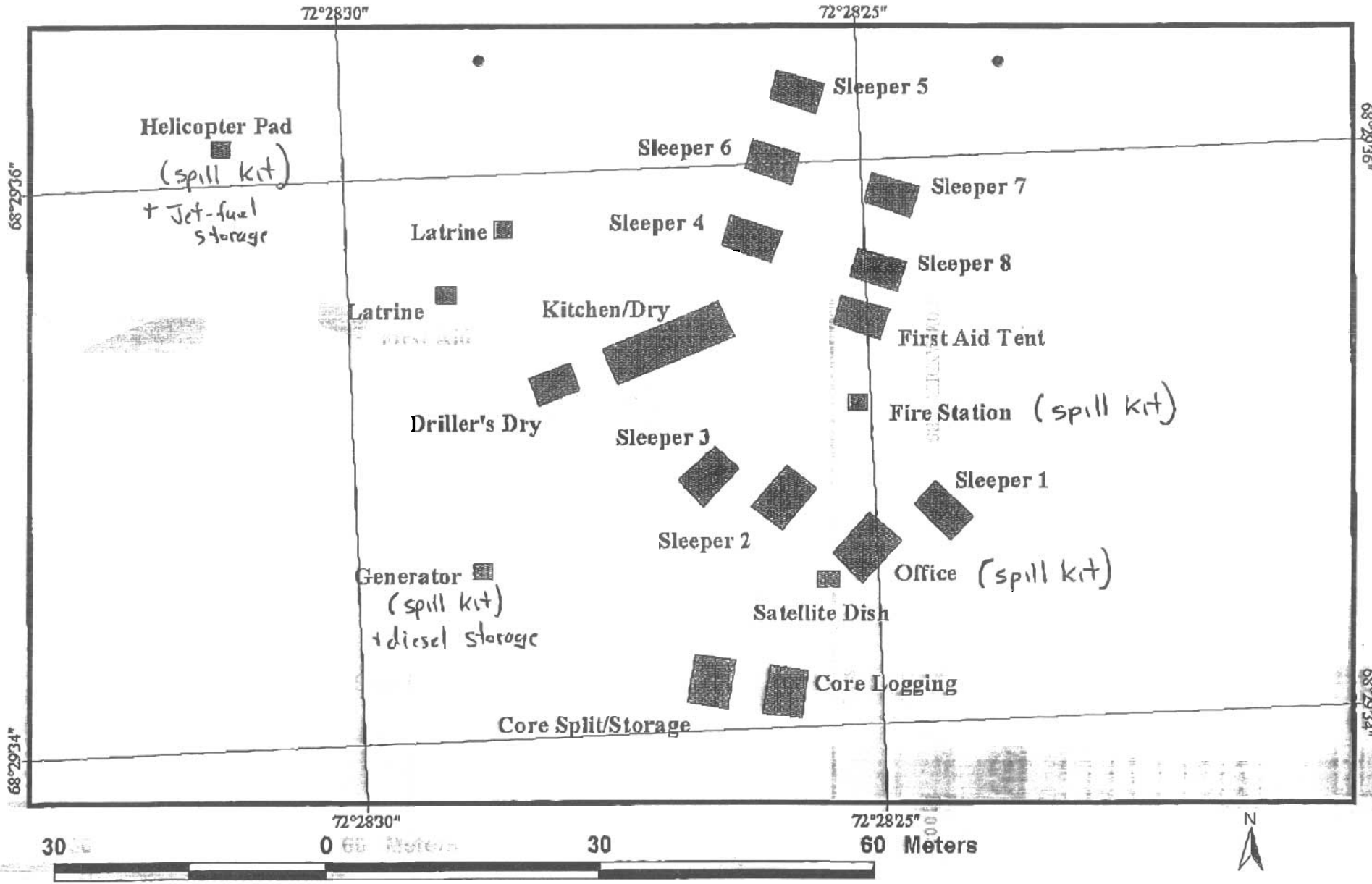
Original signed by:
Jim Wall
Technical Advisor

CC. Distribution List

NWB2NAD0206 Distribution List-August 6, 2004

NTI	Carson Gillis	cgillis@polarnet.ca	(867) 983-2723
NTI	Stefan Lopatka	slopatka@polarnet.ca	(867) 983-2723
NIRB	Gladys Joudrey	gjoudrey@nirb.nunavut.ca	(867) 983-2594
QIA Lands	Salomonie Shoo	lands@nunanet.com	(867) 979-1491
NWMB	Josee Galipeau	jgalipeau@nwmb.com	(867) 979-7785
DIAND-Iqaluit	Elizabeth Sherlock	shelocke@inac-gc.ca	(867) 975-4561
DFO-Iqaluit	Tania Gordanier	gordaniert@dfo-mpo.gc.ca	(867) 979-8039
EC Iqaluit	Colette Meloche	Colette.meloche@ec.gc.ca	(867) 975-4645
GN-DOE	Gladis Lemus	glemus@gov.nu.ca	(867) 975-5981

2004 Malrok Camp



PETRO-CANADA

Material Safety Data Sheet

WHMIS (Pictograms)	WHMIS (Classification)	Protective Clothing	TDG (pictograms)
	Not controlled		

Section 1. Chemical Product and Company Identification

Product Name	DURON® SINGLE GRADE OILS SAE VISCOSITY GRADES 10W, 20, 30, 40, 50	Code	420-054, DUR1 420-055, DUR2 420-056, DUR3 420-057, DUR4 420-058, DUR5
Synonym	Not available	Validated on	11/6/2007.
Manufacturer	PETRO-CANADA P.O. Box 2844 Calgary, Alberta T2P 3E3	In case of Emergency	Petro-Canada: 403-296-3000 Canutec Transportation: 613-996-6666 Poison Control Centre: Consult local telephone directory for emergency number(s).
Material Uses	DURON® single grade oils are intended for use in diesel and spark ignition engines according to the specific viscosity grade and performance level for each grade of product. They may also be used for wet clutch and gear type transmissions and hydraulic systems in line with equipment builder specifications.		

Section 2. Composition and Information on Ingredients

Name	CAS #	% (W/W)	Exposure Limits (ACGIH) TLV-TWA(8 h)	STEL	CEILING
1) Severely hydrotreated paraffinic oil and additives.	Mixture	100	5 mg/m³ (oil mist)	10 mg/m³ (oil mist)	Not established
Manufacturer Recommendation	Not applicable				
Other Exposure Limits	Consult local, state, provincial or territory authorities for acceptable exposure limits.				

Section 3. Hazards Identification

Potential Health Effects	Non irritating to slight transient irritation to skin and eyes, but no permanent damage. Relatively non-toxic via ingestion. This product has a low vapour pressure and is not expected to present an inhalation exposure at ambient conditions. Upon heating to high temperatures, or mechanical actions which may produce vapours or mists, inhalation of product may cause irritation of the breathing passages. For more information, refer to Section 11.

Section 4. First Aid 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.

Section 5. Fire-fighting Measures

Flammability	May be combustible at high temperature.	Flammable Limits	Not available.
Flash Points	CLOSED CUP: ≥195°C (383°F) (Pensky-Martens) OPEN CUP: ≥215°C (419°F) (Cleveland)	Auto-Ignition Temperature	Fire Point: ≥235°C (455°F)
Fire Hazards in Presence of Various Substances	Low fire hazard. This material must be heated before ignition will occur.	Explosion Hazards in Presence of Various Substances	Do not cut, weld, heat, drill or pressurize empty container. Containers may explode in heat of fire.
Products of Combustion	Carbon oxides (CO, CO2), nitrogen oxides (NOx), sulphur oxides (SOx), smoke and irritating vapours as products of incomplete combustion.		

Continued on Next Page

DURON™ SINGLE GRADE OILS SAE VISCOSITY GRADES 10W, 20, 30, 40, 50	Page Number: 2
Fire Fighting Media and Instructions	NAERG96, GUIDE 171, Substances (low to moderate hazard). If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (0.5 mile) in all directions; also, consider initial evacuation for 800 meters (0.5 mile) in all directions. Shut off fuel to fire if it is possible to do so without hazard. If this is impossible, withdraw from area and let fire burn out under controlled conditions. Withdraw immediately in case of rising sound from venting safety device or any discolouration of tank due to fire. Cool containing vessels with water spray in order to prevent pressure build-up, autoignition or explosion. SMALL FIRE: use DRY chemicals, foam, water spray or CO_2. LARGE FIRE: use water spray, fog or foam. For small outdoor fires, portable fire extinguishers may be used, and self contained breathing apparatus (SCBA) may not be required. For all indoor fires and any significant outdoor fires, SCBA is required. Respiratory and eye protection are required for fire fighting personnel.

Section 6. Accidental Release Measures	
Material Release or Spill	NAERG96, GUIDE 171, Substances (low to moderate hazard). ELIMINATE ALL IGNITION SOURCES. Avoid contact. Stop leak if without risk. Contain spill. Absorb with inert absorbents, dry clay, or diatomaceous earth. Avoid inhaling dust of diatomaceous earth for it may contain silica in very fine particle size, making this a potential respiratory hazard. Place used absorbent in closed metal containers for later disposal or burn absorbent in a suitable combustion chamber. DO NOT FLUSH TO SEWERS, STREAMS OR OTHER BODIES OF WATER. Check with applicable jurisdiction for specific disposal requirements of spilled material and empty containers. Notify the appropriate authorities immediately.

Section 7. Handling and Storage	
Handling	Avoid inhalation and skin contact especially when handling used oil. Keep away from sources of ignition. DO NOT reuse empty containers without commercial cleaning or reconditioning. Practice good personal hygiene. Wash hands after handling and before eating. Launder work clothes frequently. Discard saturated leather goods.
Storage	Store in tightly closed containers in cool, dry, isolated, well-ventilated area, and away from incompatibles.

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 considered.
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.

Section 9. Physical and Chemical Properties			
Physical State and Appearance	Viscous liquid.	Viscosity	10W: 40 cSt @ 40°C (104°F) 20: 65 cSt @ 40°C (104°F) 30: 83 cSt @ 40°C (104°F) 40: 131 cSt @ 40°C (104°F) 50: 209 cSt @ 40°C (104°F)
Colour	Amber.	Pour Point	10W: -42°C 20: -39°C 30: -36°C 40: -30°C 50: -21°C
Odour	Mild petroleum oil like.	Softening Point	Not applicable.
Odour Threshold	Not available.	Dropping Point	Not applicable.
Boiling Point	Not available.	Penetration	Not applicable.
Density	0.8604 to 0.8851 kg/L @ 15°C (59°F).	Oil / Water Dist. Coefficient	Not available
Vapour Density	Not available.	Ionicity (in water)	Not available
Vapour Pressure	Negligible at ambient temperature and pressure.	Dispersion Properties	Not available
Volatility	Non-volatile.	Solubility	Insoluble in water.

Section 10. Stability and Reactivity

Corrosivity	30, 40: Copper corrosion, 3h, 100°C (ASTM D0130): 1b. 10W, 20, 50: Copper corrosion, 3h, 100°C (ASTM D0130): 1a.		
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 halogen compounds.	acids, halogens	
		Decomposition Products	May release COx, SOx, H2S, CaOx, ZnOx, alkyl mercaptans, sulfides, aldehydes, methacrylate monomers, smoke and irritating vapours when heated to decomposition.

Section 11. Toxicological Information

Routes of Entry	Skin contact, eye contact, inhalation and ingestion.
Acute Lethality	Based on toxicity of components. Acute oral toxicity (LD50): >5000 mg/kg (rat). Acute dermal toxicity (LD50): >2000 mg/kg (rabbit). Acute inhalation toxicity (LC50): >2500 mg/m³/4h (rat).
Chronic or Other Toxic Effects	
Dermal Route:	Prolonged or repeated contact may cause skin irritation characterized by dermatitis or oil acne.
Inhalation Route:	Negligible breathing hazard at normal temperatures (Up to 38°C) or recommended blending temperatures. Elevated temperatures or mechanical action may form vapours, mists or fumes. Inhalation of oil mists or vapours from hot oil may cause irritation of the upper respiratory tract.
Oral Route:	Low toxicity; has laxative effect.
Eye Irritation/Inflammation:	Repeated or prolonged contact may cause transient irritation, but no permanent damage.
Immunotoxicity:	Not available.
Skin Sensitization:	This product is not expected to be a skin sensitizer, based on the available data and the known hazards of the components.
Respiratory Tract Sensitization:	This product is not expected to be a respiratory tract sensitizer, based on the available data and the known hazards of the components.
Mutagenic:	Based on actual test results of base oils and results of similar products, severely hydrotreated base oils give negative results when tested for: (a) Salmonella Typhimurium TA98 using the Modified Ames Assay for Petroleum Product; (b) Salmonella-Escherichia coli/Mammalian-Microsome Reverse Mutation Assay (Ames test) with a Confirmatory Assay; (c) Structural Chromosomal Aberrations in Chinese Hamster Ovary (CHO) Cells.
Reproductive Toxicity:	This product is not expected to be a reproductive hazard, based on the available data and the known hazards of the components.
Teratogenicity/Embryotoxicity:	This product is not expected to be a teratogen or an embryotoxin, based on the available data and the known hazards of the components.
Carcinogenicity (ACGIH):	This product is not known to contain any chemicals at reportable quantities that are listed as A1 or A2 carcinogens by ACGIH.
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):	Not available.
Carcinogenicity (OSHA):	This product is not known to contain any chemicals at reportable quantities that are listed as carcinogens by OSHA.
Other Considerations	No additional remark.

Section 12. Ecological Information

Environmental Fate	Not available	Persistance/ Bioaccumulation Potential	Not available
BOD5 and COD	Not available.	Products of Biodegradation	Not available
Additional Remarks	No additional remark.		

Section 13. Disposal Considerations

Waste Disposal	Spent/used waste oil may meet the requirements of a hazardous waste. Consult your local or regional authorities. Preferred waste management priorities are: (1) recycle or reprocess; (2) incineration with energy recovery; (3) disposal at licensed waste disposal facility. Ensure that disposal or reprocessing is in compliance with government requirements and local disposal regulations.

Section 14. Transport Information

TDG Classification	Not controlled under TDG (Canada).	Special Provisions for Transport	Not applicable.

Section 15. Regulatory 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 accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR. Please contact Product Safety for more information.

DSD/DPD (Europe)	Not classified under the Dangerous Substances or Dangerous Preparations Directives.	HCS (U.S.A.)	Not controlled under the HCS (United States).
ADR (Europe) (Pictograms)		DOT (U.S.A.) (Pictograms)	

HMIS (U.S.A.)	Health Hazard: 1 Fire Hazard: 1 Reactivity: 0 Personal Protection: B	NFPA (U.S.A.)		Rating	0 Insignificant 1 Slight 2 Moderate 3 High 4 Extreme

Section 16. Other Information

References: Available 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
CANTOX 51432 Prepare translation Cafe
CAS - Chemical Abstract Service
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)
DSD/DPD - Dangerous Substances or Dangerous Preparations Directives (Europe)
DSL - Domestic Substance List
EEC/EU - European Economic Community/European Union
EINECS - European Inventory of Existing Commercial Chemical Substances
EPCRA - Emergency Planning and Community Right to Know Act
FDA - Food and Drug Administration
FIFRA - Federal Insecticide, Fungicide and Rodenticide Act
HCS - Hazardous Communication System
HMIS - Hazardous Material Information System
IARC - International Agency for Research on Cancer
IRIS - Integrated Risk Information System
LD50/LC50 - Lethal Dose/Concentration at 50%
LDLo/LCLo - Lowest Published Lethal Dose/Concentration
NAERG96 - 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 Reauthorization Act
SD - Single Dose
STEL - Short Term Exposure Limit (15 minutes)
TDG - Transportation Dangerous Goods (Canada)
TDLo/TCLo - Lowest Published Toxic Dose/Concentration
TLm - Median Tolerance Limit
TLV-TWA - Threshold Limit Value-Time Weighted Average
TSCA - Toxic Substances Control Act
USEPA - United States Environmental Protection Agency
USP - United States Pharmacopoeia
WHMIS - Workplace Hazardous Material Information System

For Copy of MSDS

Lubricants:

Western Canada, telephone: 1-800-661-1199; fax: (780) 464-8364

Ontario & Central Canada, telephone: 1-800-268-5850 and (905) 822-4222; fax: 1-800-201-6285

Quebec & Eastern Canada, telephone: 1-800-876-1636; fax: 800-201-6285

For Product Safety Information: (905) 804-4752

Prepared by Product Safety - TAR on 11/6/2001.

Data entry by Product Safety - JDW.

PETRO-CANADA

Material Safety Data Sheet

WHMIS (Pictograms)	WHMIS (Classification)	Protective Clothing	TDG (pictograms)
	B-3, D-2B		

Section 1. Chemical Product and Company Identification

Product Name	DIESEL FUEL	Code	W10: SAP: 120, 121, 122, 287
Synonym	Diesel 50, Diesel 50 LS, #1 Diesel , #1 Diesel LS, Diesel LC, Seasonal Diesel, 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.	Validated on	3/2/2001.
Manufacturer	PETRO-CANADA P.O. Box 2844 Calgary, Alberta T2P 3E3	In case of Emergency	Petro-Canada: 403-296-3000 Canutec Transportation: 613-996-6666 Poison Control Center: Consult local telephone directory for emergency number(s).
Material Uses	Diesel fuels are distillate fuels suitable for use in high and medium speed internal combustion engines of the compression ignition type.		

Section 2. Composition and Information on Ingredients

Name	CAS #	% (V/V)	Exposure Limits (ACGIH) TLV-TWA(8 h)	STEL	CEILING
1) Diesel oil 2) Proprietary additives. 3) Aromatic content is 30% maximum (benzene: nil). 4) * Notice of Intended Change (2000): 100 mg/m³, skin, A3.	68334-30-5 Not available	>99.9 <0.1	Not established* Not established	Not established Not established	Not established Not established
Manufacturer Recommendation	Not applicable				
Other Exposure Limits	Consult local, state, provincial or territory authorities for acceptable exposure limits.				

Section 3. Hazards Identification

Potential Health Effects	Eye contact may cause mild eye irritation. Skin contact can cause moderate to severe irritation and produce drying, cracking, or defatting dermatitis. Inhalation of vapours can cause CNS depression with symptoms of nausea, headaches, vomiting, dizziness, fatigue, lightheadedness, reduced coordination, unconsciousness and possibly death. Inhalation can also cause irritation of nose and throat. Aspiration of liquid drops into the lungs may produce potentially fatal chemical pneumonitis (fluid in the lungs), severe lung damage, or respiratory failure. For more information, refer to Section 11.

Section 4. First Aid 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 and shoes 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

Section 5. Fire-fighting Measures

Flammability	Class II – combustible liquid (NFPA).	Flammable Limits	LOWER: 0.7%, UPPER: 6%
Flash Points	Diesel Fuel: Closed Cup: >40°C (>104°F) Marine Diesel Fuel: Closed Cup: >60°C (>140°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), sulphur oxides (SOx), sulphur compounds (H2S), water vapour (H2O), smoke and irritating vapours as products of incomplete combustion.		

Continued on Next Page Available in French

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 spray 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 until well after fire is out. Withdraw immediately in case of rising sound from venting devices or any discoloration of tank. ALWAYS stay away from the ends of tanks. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible withdraw from area and let fire burn. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6. Accidental Release Measures

Material Release or Spill	NAERG96, GUIDE 128, Flammable Liquids (Non-polar) Water-immiscible). ELIMINATE ALL IGNITION SOURCES. Avoid contact. Stop leak if without risk. Contain spill. Absorb with inert absorbents, dry clay, or diatomaceous earth. Avoid inhaling dust of diatomaceous earth for it may contain silica in very fine particle size, making this a potential respiratory hazard. Place used absorbent in closed metal containers for later disposal or burn absorbent in a suitable combustion chamber. DO NOT FLUSH TO SEWERS, STREAMS OR OTHER BODIES OF WATER. Check with applicable jurisdiction for specific disposal requirements of spilled material and empty containers. Notify the appropriate authorities immediately.

Section 7. Handling and Storage

Handling	Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk. DO NOT reuse empty containers without commercial cleaning or reconditioning. Ground/bond line and equipment during pumping or transfer to avoid accumulation of static charge. DO NOT ingest. Do not breathe gas/vapour/spray. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately. Avoid contact with skin and eyes. Practice good personal hygiene. Wash hands after handling and before eating. Launder work clothes frequently. Discard saturated leather goods.
Storage	Store in tightly closed containers in cool, dry, isolated, well-ventilated area, and away from incompatibles. Ground all equipment containing material.

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 considered.
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.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Slightly liquid.	**Viscosity**	1.3-4.1 cSt @ 40°C (104°F)
Colour	Clear to yellow / brown. Low sulphur diesel fuels (<0.05 wt % sulphur) are colourless to light yellow (and may be dyed red for taxation purposes). Regular sulphur diesel fuels (0.05-0.50 % sulphur) may be colourless to yellow / brown and are usually dyed red for taxation purposes	**Pour Point**	Variable, 9°C to -50°C (32°F to -58°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	0.85 kg/L @ 15°C (Water = 1).	**Oil / Water Dist. Coefficient**	Not available
Vapour Density	4.5 (Air = 1)	**Ionicity (in water)**	Not applicable.

: - Continued on Next Page

- Available On Request

Vapour Pressure	1.0 kPa @ 20°C (7.5 mmHg @ 68°F).	Dispersion Properties	Not available
Volatility	<0.1 (Butyl acetate = 1), less than gasoline.	Solubility	Insoluble in cold water, soluble in non-polar hydrocarbon solvents.

Section 10. Stability and Reactivity

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.

Section 11. Toxicological Information

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:	Skin contact may cause moderate to severe irritation. Repeated exposure would produce drying and cracking or defatting dermatitis.
Inhalation Route:	Inhalation of vapours can cause CNS depression with symptoms of nausea, headaches, vomiting, dizziness, fatigue, light-headedness, reduced coordination, unconsciousness and possibly death. Inhalation can also cause irritation of nose and throat.
Oral Route:	Aspiration of liquid drops into the lungs may produce potentially fatal chemical pneumonitis (fluid in the lungs), severe lung damage, or respiratory failure.
Eye Irritation/Inflammation:	Eye contact may cause mild irritation, but no permanent damage.
Immunotoxicity:	Not available
Skin Sensitization:	This product is not expected to be a skin sensitizer, based on the available data and the known hazards of the components.
Respiratory Tract Sensitization:	This product is not expected to be a respiratory tract sensitizer, based on the available data and the known hazards of the components.
Mutagenic:	This product is not expected to be a mutagen, based on the available data and the known hazards of the components.
Reproductive Toxicity:	This product is not expected to be a reproductive hazard, based on the available data and the known hazards of the components.
Teratogenicity/Embryotoxicity:	This product is not expected to be a teratogen or an embryotoxin, based on the available data and the known hazards of the components.
Carcinogenicity (ACGIH):	ACGIH Notice of Intended Changes (2009): proposed A3: animal carcinogen. [Diesel oil]
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):	Not available
Carcinogenicity (OSHA):	This product is not known to contain any chemicals at reportable quantities that are listed as carcinogens by OSHA.
Other Considerations	No additional remark.

Section 12. Ecological Information

Environmental Fate	Not available	Persistance/ Bioaccumulation Potential	Not available
BOD5 and COD	Not available	Products of Biodegradation	Not available
Additional Remarks	No additional remark.		

Section 13. Disposal Considerations

Waste Disposal Preferred waste management priorities are: (1) recycle or reprocess; (2) incineration with energy recovery; (3) disposal at licensed waste disposal facility. Ensure that disposal or reprocessing is in compliance with government requirements and local disposal regulations. Consult your local or regional authorities.

Section 14. Transport Information

TDG Classification	Diesel Fuel UN1202 3 III	**Special Provisions for Transport**	Not applicable.

Section 15. Regulatory 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 accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

Please contact Product Safety for more information.

DSD/DPD (Europe)	Not evaluated.	**HCS (U.S.A.)**	CLASS: Irritating substance. CLASS: Target organ effects. CLASS: Combustible liquid having a flash point between 37.8°C (100°F) and 93.3°C (200°F).
ADR (Europe) (Pictograms)	NOT EVALUATED FOR EUROPEAN TRANSPORT NON EVALUE POUR LE TRANSPORT EUROPEEN	**DOT (U.S.A) (Pictograms)**	

HMIS (U.S.A.)

Health Hazard	2*
Fire Hazard	3
Reactivity	0
Personal Protection	H

NFPA (U.S.A.)

Rating: 0 Insignificant, 1 Slight, 2 Moderate, 3 High, 4 Severe

Section 16. Other Information

References Available 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 Act
COD5 - Chemical Oxygen Demand in 5 days
CPR - Controlled Products Regulations
DOT - Department of Transport
DSCL - Dangerous Substances Classification and Labeling (Europe)
DSD/DPD - Dangerous Substances or Dangerous Preparations Directives (Europe)
DSL - Domestic Substance List
EEC/EU - European Economic Community/European Union
EINECS - European Inventory of Existing Commercial Chemical Substances
EPCRA - Emergency Planning and Community Right to Know Act
FDA - Food and Drug Administration
FIFRA - Federal Insecticide, Fungicide and Rodenticide Act
HCS - Hazardous Communication System
HMIS - Hazardous Material Information System
IARC - International Agency for Research on Cancer
IRIS - Integrated Risk Information System
LD50/LC50 - Lethal Dose/Concentration 50%
LDLo/LCLo - Lowest Published Lethal Dose/Concentration
NAERG96 - 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 Reauthorization Act
SD - Single Dose
STEL - Short Term Exposure Limit (15 minutes)
TDG - Transportation Dangerous Goods (Canada)
TDLo/TCLo - Lowest Published Toxic Dose/Concentration
TLE - Median Tolerance Limit
TLV-TWA - Threshold Limit Value-Time Weighted Average
TSCA - Toxic Substances Control Act
USEPA - United States Environmental Protection Agency
USP - United States Pharmacopoeia
WHMIS - Workplace Hazardous Material Information System

For Copy of MSDS
Fuels & Solvents:
Western Canada, telephone: 403-296-4166; fax: 403-296-5551
Ontario & Central Canada, telephone: 1-800-668-8220; fax: 1-800-837-1228
Quebec & Eastern Canada, telephone: 514-640-8308; fax: 514-640-8185

For Product Safety Information: (905) 804-4752

Prepared by Product Safety - TAR on 3/2/2001.

Data entry by Product Safety - JDW.

IMPERIAL OIL
MATERIAL SAFETY DATA SHEET
TURBINE FUEL TYPE AVIATION, WIDE CUT

Date Prepared: June 15, 2000
Supersedes: April 21, 1999
MSDS Number: 08524

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1. PRODUCT INFORMATION

Product Identifier: TURBINE FUEL AVIATION, WIDE CUT TYPE
ESSO TURBO FUEL B
ESSO JET B
JET B
TURBO FUEL B
TURBO FUEL B F40
TURBO FUEL B JP4
ESSO TURBO FUEL B <FSII>
JET B <FSII>
AVIATION TURBINE FUEL <JP4>
CAN/CGSB-3.22 GRADE F40
ESSO JET B <FSII>

Application and Use:
Aviation turbine fuel

Product Description:

A mixture of aliphatic and aromatic hydrocarbons and additives.

REGULATORY CLASSIFICATION

WHMIS:
Class B, Division 2: Flammable Liquids.
Class D, Division 2, Subdivision A: Very Toxic Material.
Class D, Division 2, Subdivision B: Toxic Material

CEPA: CANADIAN ENVIRONMENTAL PROTECTION ACT
All components of this product are either on the Domestic Substances List (DSL) or are exempt.

TDG INFORMATION (RAIL/ROAD):

Shipping Name: FUEL, AVIATION, TURBINE ENGINES
Class: 3
Packing Group: II
PIN Number: UN1863

Please be aware that other regulations may apply.

TELEPHONE NUMBERS		MANUFACTURER/SUPPLIER:
Emergency 24 hr.	(519) 339-2145	IMPERIAL OIL
Technical Info.	(800) 268-3183	Products Division
		111 St Clair Avenue West
		Toronto, Ontario
		M5W 1K3
		(416) 968-4441

2. REGULATED COMPONENTS

The following components are defined in accordance with sub-paragraph 13(a) (i) to (iv) or paragraph 14(a) of the Hazardous Products Act:

NAME	%	CAS #	
Kerosene, straight run	40-70 V/V	8008-20-6	LD50:>5g/kg,oral,rat
Naphtha, full range	30-60 V/V	64741-42-0	
Ethylene Glycol Monomethyl Ether	0-0.15 V/V	109-86-4	LD50:2.4g/kg,orl,rat LD50:0.8g/kg,orl,rab
Diethylene glycol monomethyl ether	0-0.15 V/V	111-77-3	LD50:9.2g/kg,orl,rat LD50:6.6g/kg,skn.rbt

3. TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Physical State: Liquid
Specific gravity: not available
Viscosity: 0.60 cSt at 40 deg C
Vapour Density: 4
Boiling Point: 40 to 270 deg C
Evaporation rate: <1 (1= n-butylacetate)
Solubility in water: negligible
Freezing/Pour Point: -58 deg C ASTM D 2386
Odour Threshold: not available
Vapour Pressure: 21 kPa at 38 deg C
Density: 0.78 g/cc at 15 deg C
Appearance/odour: White or pale yellow liquid, petroleum odour

4. HEALTH HAZARD INFORMATION

NATURE OF HAZARD

INHALATION:

Negligible hazard at normal temperatures (up to 38 deg C).
High vapour concentrations are irritating to the eyes, nose, throat and lungs; may cause headaches and dizziness; may be anesthetic and may cause other central nervous system effects.
Avoid breathing vapours or mists.

EYE CONTACT:

Slightly irritating, but will not injure eye tissue.

SKIN CONTACT:

Irritating.
Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).
Low toxicity.

INGESTION:

Low toxicity.
Small amounts of this liquid drawn into the lungs from swallowing or vomiting may cause severe health effects (e.g. bronchopneumonia or pulmonary edema).

CHRONIC:

May contain ethylene glycol monomethyl ether (EGME). Prolonged and/or repeated exposure through inhalation or extensive skin contact with EGME may result in toxic effects on the blood, the blood producing system, the kidneys, the male reproductive system and the embryo/fetus.
Contains benzene. Human health studies (epidemiology) indicate that prolonged and/or repeated overexposures to benzene may cause damage to the blood producing system and serious blood disorders, including leukemia.
Animal tests suggest that prolonged and/or repeated overexposures to benzene may damage the embryo/fetus. The relationship of these animal studies to humans has not been fully established.
Contains n-hexane. Prolonged and/or repeated exposures may cause damage to the peripheral nervous system (e.g. fingers, feet, arms etc.).
Contains diethylene glycol monomethyl ether (DIEGME). Prolonged and repeated exposure through inhalation or extensive skin contact with DIEGME may result in toxic effects on the kidneys, the reproductive system and/or the embryo/fetus.

ACUTE TOXICITY DATA:

Based on animal testing data from similar materials and products, the acute toxicity of this product is expected to be:

Oral	:	LD50 > 5000 mg/kg	(Rat)
Dermal	:	LD50 > 2000 mg/kg	(Rabbit)
Inhalation	:	LC50 > 2500 mg/m3	(Rat)

OCCUPATIONAL EXPOSURE LIMIT:

Manufacturer recommends:

100 ppm based on composition.
For Benzene (skin) 1 ppm TWA for 8 hour workday.

ACGIH recommends:
For n-Hexane (skin), 50 ppm (176 mg/m3).
For Benzene, ACGIH recommends a TWA of 0.5 ppm (1.6 mg/m3), (skin), and categorizes it as a confirmed human carcinogen.
For 2-Methoxyethanol, (skin) 5 ppm (16 mg/m3).

Local regulated limits may vary.

5. FIRST AID MEASURES

INHALATION:

In emergency situations use proper respiratory protection to immediately remove the affected victim from exposure. Administer artificial respiration if breathing has stopped. Keep at rest. Call for prompt medical attention.

EYE CONTACT:

Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

SKIN CONTACT:

Immediately flush with large amounts of water. Use soap if available. Remove contaminated clothing, including shoes, after flushing has begun. If irritation persists, seek medical attention.

INGESTION:

DO NOT induce vomiting since it is important that no amount of the material should enter the lungs (aspiration). Keep at rest. Get prompt medical attention.

6. PREVENTIVE AND CORRECTIVE MEASURES

PERSONAL PROTECTION:

The selection of personal protective equipment varies, depending upon conditions of use.
In open systems where contact is likely, wear safety goggles, chemical-resistant overalls, and chemically impervious gloves.
Where only incidental contact is likely, wear safety goggles, long sleeves,
and chemical-resistant gloves.
Where concentrations in air may exceed the occupational exposure limits given in Section 4 and where engineering, work practices or other means

of exposure reduction are not adequate, approved respirators may be necessary to prevent overexposure by inhalation.

ENGINEERING CONTROLS:

The use of local exhaust ventilation is recommended to control emissions near the source. Laboratory samples should be handled in a fumehood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

HANDLING, STORAGE AND SHIPPING:

Keep containers closed. Handle and open containers with care. Store in a cool, well ventilated place away from incompatible materials. In keeping with good personal hygiene practices, wash hands thoroughly after handling the material.

Store and load at normal (up to 38 deg C) temperature and at atmospheric pressure.
Material will accumulate static charges which may cause a spark. Static charge build-up could become an ignition source. Use proper relaxation and grounding procedures.
Empty containers may contain product residue. Do not pressurize cut, heat, or weld empty containers. Do not reuse empty containers without commercial cleaning or reconditioning.

LAND SPILL:

Eliminate source of ignition. Keep public away. Prevent additional discharge of material, if possible to do so without hazard.
Vapours or dust may be harmful or fatal. Warn occupants of downwind areas.
Prevent spills from entering sewers, watercourses or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust.
Recover by pumping (use an explosion proof motor or hand pump), or by using a suitable absorbent.
Consult an expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately.
Take all additional action necessary to prevent and remedy the adverse effects of the spill.

WATER SPILL:

Eliminate all sources of ignition. Vapours or dust may be harmful or fatal. Warn occupants and shipping in downwind areas.
Consult an expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately.
Take all additional action necessary to prevent and remedy the adverse effects of the spill.

7. FIRE AND EXPLOSION HAZARD

Flashpoint and method: -18 deg C COC ASTM D92

Autoignition: NA Flammable Limits: LEL: 0.6% UEL: 8.0%

GENERAL HAZARDS:

Extremely flammable; material will readily ignite at normal temperatures.
Flammable liquid; may release vapours that form flammable mixtures at or above the flash point.
Decomposes; flammable/toxic gases will form at elevated temperatures (thermal decomposition).
Toxic gases will form upon combustion.
Static Discharge; material may accumulate static charges which may cause a fire.

FIRE FIGHTING:

Use water spray to cool fire exposed surfaces and to protect personnel.
Shut off fuel to fire if possible to do so without hazard. If a leak or spill has not ignited use water spray to disperse the vapours.
Either allow fire to burn out under controlled conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam.
Respiratory and eye protection required for fire fighting personnel.
Avoid spraying water directly into storage containers due to danger of boilover.
A self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of an SCBA may not be required.

HAZARDOUS COMBUSTION PRODUCTS:

Smoke, carbon monoxide, carbon dioxide and traces of oxides of sulphur
In addition, small amounts of nitrogen oxides will be formed.

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8. REACTIVITY DATA

STABILITY:

This product is stable. Hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Strong oxidizing agents. Use product with caution around heat, sparks, pilo
lights, static electricity and open flames.

HAZARDOUS DECOMPOSITION:

See: Hazardous Combustion Products

9. NOTES

All components of this product are listed on the U.S. TSCA inventory.

Boiling point change.

REVISION SUMMARY:
Since 21 April 1999, this MSDS has been revised in Section(s):
2, 3

10. PREPARATION

Date Prepared: June 15, 2000
Prepared by: Lubricants & Specialties
IMPERIAL OIL
Products Division
111 St Clair Avenue West
Toronto, Ontario
M5W 1K3
(800) 268-3183

CAUTION: " The information contained herein relates only to this product or material and may not be valid when used in combination with any other product or material or in any process. If the product is not to be used for a purpose
or under conditions which are normal or reasonably foreseeable, this information cannot be relied upon as complete or applicable. For greater certainty, uses other than those described in Section 1 must be reviewed with the supplier. The information contained herein is based on the information available at the indicated date of preparation. This MSDS is for the use of Imperial Oil customers and their employees and agents only. Any further distribution of this MSDS by Imperial Oil customers is prohibited without the written consent of Imperial Oil."

Material Safety Data Sheet

Chevron

CHEVRON REGULAR UNLEADED GASOLINE

MSDS: 002655 Revision #: 28 Revision Date: 07/31/99

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEVRON REGULAR UNLEADED GASOLINE

PRODUCT NUMBER(S): CPS201000 CPS201023 CPS201054 CPS201055
CPS201075 CPS201105 CPS201110 CPS201116
CPS201118 CPS201120 CPS201121 CPS201122
CPS201126 CPS201128 CPS201131 CPS201136
CPS201141 CPS201142 CPS201148 CPS201153
CPS201158 CPS201161 CPS201162 CPS201168
CPS201181 CPS201185 CPS201186 CPS201188
CPS201216 CPS201217 CPS201218 CPS201236
CPS201237 CPS201238 CPS201266 CPS201267
CPS201268 CPS201277 CPS201278 CPS201279
CPS201286 CPS201287 CPS201289 CPS201296
CPS201297 CPS201298 CPS241765

SYNONYM: Calco Regular Unleaded Gasoline

COMPANY IDENTIFICATION

Chevron Products Company
575 Market St.
San Francisco, CA 94105-2856

EMERGENCY TELEPHONE NUMBERS

HEALTH (24 hr): (800)231-0623 or
(510)231-0623 (International)
TRANSPORTATION (24 hr): CHEMTREC
(800)424-9300 or (703)527-3887
Emergency Information Centers
are located in U.S.A.
Int'l collect calls accepted

PRODUCT INFORMATION: MSDS Requests
(800) 689-3998
(510) 242-5357 Technical Information

SPECIAL NOTES: This MSDS applies to: Federal Reformulated Gasoline, California Reformulated Gasoline, Wintertime Oxygenated Gasoline, Low RVP Gasoline and Conventional Gasoline.

2. COMPOSITION/INFORMATION ON INGREDIENTS

100.0 % CHEVRON REGULAR UNLEADED GASOLINE
CONTAINING

COMPONENTS	AMOUNT	LIMIT/QTY	AGENCY/TYPE
GASOLINE (GENERIC)	100.00%	890 mg/m3	ACGIH TWA
		1480 mg/m3	ACGIH STEL
		2000 mg/m3	OSHA PEL
POTENTIALLY			
INCLUDING			
BENZENE			
Chemical Name: BENZENE			
CAS71432	< 4.90%	0.5 ppm	ACGIH TWA
		2.5 ppm	ACGIH STEL
		1 ppm	OSHA PEL
		5 ppm	OSHA CEILING
		10 LBS	CERCLA 302.4 RQ
ETHYL BENZENE			
Chemical Name: BENZENE, ETHYL-			
CAS100414		100 ppm	ACGIH TWA
		125 ppm	ACGIH STEL
		100 ppm	OSHA PEL
		1,000 LBS	CERCLA 302.4 RQ
XYLENE			
Chemical Name: BENZENE, DIMETHYL-			
CAS1330207		100 ppm	ACGIH TWA
		150 ppm	ACGIH STEL
		100 ppm	OSHA PEL
		100 LBS	CERCLA 302.4 RQ
TOLUENE			
Chemical Name: TOLUENE			
CAS108883		50 ppm	ACGIH TWA
		200 ppm	OSHA PEL
		300 ppm	OSHA CEILING
		1,000 LBS	CERCLA 302.4 RQ
N-BUTANE			
Chemical Name: N-BUTANE			
CAS106978		800 ppm	ACGIH TWA
N-HEPTANE			
Chemical Name: N-HEPTANE			
CAS142825		400 ppm	ACGIH TWA
		500 ppm	ACGIH STEL
		500 ppm	OSHA PEL
N-HEXANE			
Chemical Name: N-HEXANE			
CAS110543		50 ppm	ACGIH TWA
		500 ppm	OSHA PEL
		5,000 LBS	CERCLA 302.4 RQ
HEXANE ISOMERS (OTHER THAN N)			
HEXANES		500 ppm	ACGIH TWA
		1000 ppm	ACGIH STEL
PENTANE (ALL ISOMERS)			
PENTANES		600 ppm	ACGIH TWA

		750 ppm	ACGIH STEL
		1000 ppm	OSHA PEL
CYCLOHEXANE			
Chemical Name: CYCLOHEXANE			
CAS110827		300 ppm	ACGIH TWA
		300 ppm	OSHA PEL
		1,000 LBS	CERCLA 302.4 RQ
METHYLCYCLOHEXANE			
Chemical Name: CYCLOHEXANE, METHYL			
CAS108872		400 ppm	ACGIH TWA
		500 ppm	OSHA PEL
TRIMETHYLBENZENE			
Chemical Name: BENZENE, TRIMETHYL-			
CAS25551137		25 ppm	ACGIH TWA
2,2,4-TRIMETHYLPENTANE			
Chemical Name: 2,2,4-TRIMETHYLPENTANE			
CAS540841		1,000 LBS	CERCLA 302.4 RQ
CAN CONTAIN			
METHYL TERT BUTYL ETHER (MTBE)			
Chemical Name: 2-METHOXY-2-METHYL PROPANE			
CAS1634044	< 15.00%	40 ppm	ACGIH TWA
		50 ppm	Chevron STEL
		1,000 LBS	CERCLA 302.4 RQ
ETHYL TERT BUTYL ETHER (ETBE)			
Chemical Name: 2-ETHOXY-2-METHYL PROPANE			
CAS637923	< 18.00%	NONE	NA
TERT-AMYL METHYL ETHER (TAME)			
Chemical Name: 2-METHOXY-2-METHYL-BUTANE			
CAS994058	< 17.00%	50 ppm	Chevron STEL
OR			
ETHANOL			
Chemical Name: ETHYL ALCOHOL			
CAS64175	< 10.00%	1000 ppm	ACGIH TWA
		1000 ppm	OSHA PEL

COMPOSITION COMMENT:
Refer to the OSHA Benzene Standard (29 CFR 1910.1028) and Table Z-2 for detailed training, exposure monitoring, respiratory protection and medical surveillance requirements before using this product.

Motor gasoline is considered a mixture by EPA under the Toxic Substances Control Act (TSCA). The refinery streams used to blend motor gasoline are all on the TSCA Chemical Substances Inventory. The appropriate CAS number for refinery blended motor gasoline is 86290-81-5. The product specifications of motor gasoline sold in your area will depend on applicable Federal and State regulations. Ethyl Alcohol is only added in limited specific distribution areas.

3. HAZARDS IDENTIFICATION

********** EMERGENCY OVERVIEW **********

Colorless to yellow liquid

- EXTREMELY FLAMMABLE
- HARMFUL OR FATAL IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE
- VAPOR HARMFUL
- MAY CAUSE EYE AND SKIN IRRITATION
- LONG-TERM EXPOSURE TO VAPOR HAS CAUSED CANCER IN LABORATORY ANIMALS
- KEEP OUT OF REACH OF CHILDREN

****

IMMEDIATE HEALTH EFFECTS
EYE:
Contact with the eyes causes irritation. Eye contact with the vapors, fumes, or spray mist from this substance could also cause similar signs and symptoms.
SKIN:
Contact with the skin causes irritation. Not expected to be harmful to internal organs if absorbed through the skin. Prolonged or frequently repeated contact may cause the skin to become cracked or dry from the defatting action of this material.
INGESTION:
Because of the low viscosity of this substance, it can directly enter the lungs if it is swallowed (this is called aspiration). This can occur during the act of swallowing or when vomiting the substance. Once in the lungs, the substance is very difficult to remove and can cause severe injury to the lungs and death.
INHALATION:
May be harmful if inhaled. Breathing the vapors at concentrations above the recommended exposure standard can cause central nervous system effects. The vapor or fumes from this material may cause respiratory irritation.
SIGNS AND SYMPTOMS OF EXPOSURE:
Eye damage or irritation: may include pain, tearing, reddening, swelling, and impaired vision. Skin injury: may include pain, discoloration, swelling, and blistering. Respiratory irritation: may include coughing and difficulty breathing. Central nervous system effects may include headache, dizziness, nausea, vomiting, weakness, loss of coordination, blurred vision, drowsiness, confusion, or disorientation. At extreme exposures, central nervous system effects may include respiratory depression, tremors or convulsions, loss of consciousness, coma or death.
CARCINOGENICITY:
Risk depends on duration and level of exposure. See Section 11 for additional information. Gasoline has been classified as a Group 2B carcinogen (possibly carcinogenic to humans) by the International Agency for Research on Cancer (IARC). Contains chemical(s) known to the State of California to cause cancer. Contains benzene, which has been classified as a carcinogen by the National Toxicology Program (NTP), and a Group 1 carcinogen (carcinogenic to humans) by the International Agency for Research on Cancer (IARC).

Whole gasoline exhaust was reviewed by the International Agency for Research on Cancer (IARC) in their Monograph Volume 46 (1989). Evidence for causing cancer was considered inadequate in animals and inadequate in humans. IARC placed whole gasoline exhaust in Category 2B, considering it possibly carcinogenic to humans.

4. FIRST AID MEASURES

EYE:
Flush eyes with water immediately while holding the eyelids open. Remove contact lenses, if worn, after initial flushing, and continue flushing for at least 15 minutes. Get medical attention if irritation persists.
SKIN:
Wash skin immediately with soap and water and remove contaminated clothing and shoes. Get medical attention if irritation persists. Discard contaminated clothing and shoes or thoroughly clean before reuse.
INGESTION:
If swallowed, give water or milk to drink and telephone for medical advice. DO NOT make person vomit unless directed to do so by medical personnel. If medical advice cannot be obtained, then take the person and product container to the nearest medical emergency treatment center or hospital.
INHALATION:
Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue.
NOTE TO PHYSICIANS:
Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid which can cause pneumonitis.

5. FIRE FIGHTING MEASURES

FIRE CLASSIFICATION:
OSHA Classification (29 CFR 1910.1200): Flammable liquid. See section 7 for appropriate handling and storage conditions.
FLAMMABLE PROPERTIES:
FLASH POINT: (TCC) < -43F (<-45C)
AUTOIGNITION: NDA
FLAMMABILITY LIMITS (% by volume in air): Lower: 1.4 Upper: 7.6
EXTINGUISHING MEDIA:
Dry Chemical, CO2, AFFF Foam or alcohol resistant foam if >15% volume polar solvents (oxygenates).
NFPA RATINGS: Health 1; Flammability 3; Reactivity 0.
FIRE FIGHTING INSTRUCTIONS:
Use water spray to cool fire-exposed containers and to protect personnel. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.
COMBUSTION PRODUCTS:
Normal combustion forms carbon dioxide and water vapor; incomplete combustion can produce carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

CHEMTREC EMERGENCY NUMBER (24 hr): (800)424-9300 or (703)527-3887
International Collect Calls Accepted
ACCIDENTAL RELEASE MEASURES:
Eliminate all sources of ignition in the vicinity of the spill or released vapor.

Stop the source of the leak or release. Clean up releases as soon as possible, observing precautions in Exposure Controls/Personal Protection. Contain liquid to prevent further contamination of soil, surface water or groundwater. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases. Place contaminated materials in disposable

containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

Release of this product should be prevented from contaminating soil and water and from entering drainage and sewer systems. U.S.A. regulations require reporting spills of this material that could reach any surface waters. The toll free number for the U.S. Coast Guard National Response Center is (800) 424-8802.

7. HANDLING AND STORAGE

This product presents an extreme fire hazard. Liquid very quickly evaporates, even at low temperatures, and forms vapor (fumes) which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches.

Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating an accumulation of electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, "Flammable and Combustible Liquids", National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity", and/or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents".

Improper filling of portable gasoline containers creates danger of fire. Only dispense gasoline into approved and properly labeled gasoline containers. Always place portable containers on the ground. Be sure pump nozzle is in contact with the container while filling. Do not use a nozzle's lock-open device. Do not fill portable containers that are inside a vehicle or truck/trailer bed.

Never siphon gasoline by mouth. Use only as a motor fuel. Do not use for cleaning, pressure appliance fuel, or any other such use. DO NOT USE OR STORE near heat, sparks or open flames. USE AND STORE ONLY IN WELL VENTILATED AREA. Keep container closed when not in use. READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner, or properly disposed of.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:
Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal

protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS
Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT
EYE/FACE PROTECTION:
No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.
SKIN PROTECTION:
No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances. Suggested materials for protective gloves include: <Nitrile> <Polyurethane> <Viton> <Chlorinated Polyethylene (or Chlorosulfonated Polyethylene or CPE)>
RESPIRATORY PROTECTION:
Determine if airborne concentrations are below the recommended exposure limits. If not, wear a NIOSH approved respirator that provides adequate protection from measured concentrations of this material. Use the following element(s) for air-purifying respirators: Organic Vapor. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION:
Colorless to yellow liquid

pH:	NDA
VAPOR PRESSURE:	5 - 15 PSI @ 100F (REID)
VAPOR DENSITY (AIR=1):	3-4
BOILING POINT:	25 - 225C
FREEZING POINT:	NDA
MELTING POINT:	NA
SOLUBILITY:	Soluble in hydrocarbons; insoluble in water.
SPECIFIC GRAVITY:	0.7 - 0.8 @ 15.6/15.6C
EVAPORATION RATE:	NDA
PERCENT VOLATILE (VOL):	99+%

10. STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:
None known
CHEMICAL STABILITY:
Stable.
CONDITIONS TO AVOID:
See section 7.
INCOMPATIBILITY WITH OTHER MATERIALS:
May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
HAZARDOUS POLYMERIZATION:

Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS:
The mean 24-hour Draize eye irritation score in rabbits is 0.
SKIN EFFECTS:
This material was not a skin sensitizer in the modified Buehler Guinea Pig Sensitization Test. For a 4-hour exposure, the Primary Irritation Index (PII) in rabbits is: 4.8.
ACUTE ORAL EFFECTS:
The oral LD50 in rats is > 5 ml/kg.
ACUTE INHALATION EFFECTS:
No product toxicology data available.
ADDITIONAL TOXICOLOGY INFORMATION:
When vapor exposures are low, or short duration and infrequent, such as during refuelling and tanker loading/unloading, neither total hydrocarbon nor components such as benzene are likely to result in any adverse health effects. In situations such as accidents or spills where exposure to gasoline vapor and liquid is potentially high, attention should be paid to potential toxic effects of specific components in addition to those of total hydrocarbons. Information about specific components in gasoline are found in Section 1 and Section 15 of this MSDS. More detailed information on the health hazard of specific gasoline components can be obtain from the Chevron Emergency Information Center (see Section 1 for telephone numbers).

A study was done in which ten volunteers were exposed for 30 minutes to about 200, 500 or 1000 ppm concentrations of the vapor of three different unleaded gasolines. Irritation of the eyes was the only significant effect observed, based on both subjective and objective assessments.

An inhalation study with rats exposed to 0, 400 and 1600 ppm of wholly vaporized unleaded gasoline, 6 hours per day on day 6 through 16 of gestation, showed no teratogenic effects nor indication of toxicity to either the mother or the fetus (sex ratio, embryotoxicity, fetal growth and development).

An inhalation study with pregnant rats exposed to 0, 1000, 3000, and 9000 ppm of unleaded gasoline vapor, 6 hours per day on days 6 through 20 of gestation, showed no teratogenic effects nor indications of toxicity to either the mother or the fetus.

In an inhalation study, groups of 6 Fischer rats (3 male, 3 female) were exposed to 2056 ppm of wholly vaporized unleaded gasoline for 6 hours per day, 5 day per week for up to 18 months. Histopathology of the peripheral nervous system and spinal cord revealed no distal axonal neuropathy of the type associated with exposure to n-hexane even though gasoline contained 1.9% n-hexane. The authors concluded that gasoline treatment may have amplified the incidence and prominence of some naturally occurring age related changes in the nervous system.

Wholly vaporized unleaded gasoline was used in a 3 month inhalation study. Groups of 40 rats (20 males, 20 female) and 8 squirrel monkeys (4 male, 4 female) were exposed 6 hours per day and 5 days per week for 13 weeks to 384 or 1552 ppm gasoline. One group of each species served as unexposed controls. The initial conclusion of this study was that inhalation of gasoline at airborne concentrations of up to 1522 ppm caused no toxicity in rats or monkeys. However, further histopathological examination of male rat kidneys on the highest dose group revealed an increased incidence and severity of regenerative epithelium and dilated tubules containing proteinaceous deposits.

Rabbits were exposed to unleaded gasoline 24 hour per day, 5 days per week for two weeks; 0, 2.5, 5 or 8 ml were applied to the skin under an occlusive dressing. Applied in such a way, this motor gasoline was corrosive to the rabbit skin and animals in all dose groups had decreased bodyweights. The slight and/or isolated systemic effects noted in the study were judged to be not significant.

Unleaded gasoline was assayed for mutagenic and cytogenetic activity. Gasoline was not mutagenic, either with or without activation, in Ames assay (Salmonella typhimurium), Saccharamyces cerevisesae, or mouse lymphoma assays. In addition, point mutations were not induced in human lymphocytes exposed to gasoline in vivo. The gasoline was not mutagenic when tested in the mouse dominant lethal assay. Administration of gasoline to rats did not cause chromosomal aberrations in their bone marrow cells.

In a lifetime skin painting study, 50 male Swiss mice were treated with 0.05 ml of unleaded gasoline three times per week. Positive control groups were treated with benzo(a)pyrene in acetone; an untreated negative control group was also included. The repeated exposure to gasoline caused severe skin irritation, ulceration, hyperkeratosis and abscesses. There was no statistically significant increase in the incidence of skin tumors. Histopathology at the end of the study showed that unleaded gasoline did not increase the incidence of tumors in other organs.

Lifetime inhalation of wholly vaporized unleaded gasoline at 2056 ppm has caused increased liver tumors in female mice. The mechanism of this response is still being investigated but is thought to be an epigenetic process unique to the female mouse. This exposure also caused kidney damage and eventually kidney cancer in male rats. No other animal model studied has shown these adverse kidney effects and there is no physiological reason to believe that they would occur in man. EPA has concluded that the mechanism by which wholly vaporized unleaded gasoline causes kidney damage is unique to the male rat. The response in that species (kidney damage and cancer) should not be used in human risk assessment.

In their 1989 review of carcinogenic risk from gasoline, The International Agency for Research on Cancer (IARC) noted that, because published epidemiology studies did not include any exposure data, only occupations where gasoline exposure may have occurred were reviewed. These included gasoline service station attendants and automobile mechanics. IARC also noted that there was no opportunity to separate effects of combustion products from those of gasoline itself. Although IARC allocated gasoline a final overall classification of Group 2B, i.e. possibly carcinogenic to humans, this was based on limited evidence in experimental animals plus supporting evidence including the presence in gasoline of benzene and 1, 3-butadiene. The actual evidence for carcinogenicity in humans was considered inadequate.

To explore the health effects of workers potentially exposed to gasoline vapors in the marketing and distribution sectors of the petroleum industry, the American Petroleum Institute sponsored a cohort mortality, a nested case-control, and an exposure assessment study. Histories of exposure to gasoline were reconstructed for a cohort of more than 18,000 employees from four companies for the time period between 1946 and 1985. Data were analyzed based on length of employment, length of exposure, job category, age at first exposure and estimated cumulative and peak exposures. Cumulative exposure was defined as the sum of products of TWA exposure and duration of exposure of each job in an employee's work history. Among cohort members, cumulative exposure ranged from 2 to 8,000 ppm-years. In general, long-term drivers at small terminals had the highest exposures, and short-term workers with "other terminal jobs" had

the lowest. A peak exposure was defined as an episode in excess of 500 ppm lasting 15 to 90 minutes.

The results of the cohort study indicated that there was no increased mortality from either kidney cancer or leukemia among marketing and marine distribution employees who were exposed to gasoline in the petroleum industry, when compared to the general population. More importantly, based on internal comparisons, there was no association between mortality from kidney cancer or leukemia and various indices of gasoline exposure.

For acute myeloid leukemia (AML), a non-significant mortality increase was found in land-based terminal employees, but no trend was detected when the data were analyzed by various gasoline exposure indices. This non-significant excess was limited to land-based terminal employees hired prior to 1948. On the other hand, a deficit of mortality from AML was observed among marine employees.

In addition to the cohort study, a subsequent nested case-control study was also conducted. Four diseases were selected for analysis in the case-control study: Leukemia (all cell types), AML, kidney cancer and multiple myeloma. For each case, five individually matched controls were randomly selected from the cohort. In the original cohort study, broad generic job categories were used as part of exposure assessment. In the case-control study, a finer and more homogeneous job classification was developed. In addition to job category, several quantitative gasoline exposure indices were used in the case-control analysis: length of exposure, cumulative exposure (ppm-years in terms of total hydrocarbons) and frequency of peak exposure. Time period of first exposure to gasoline (1948 or before and 1949 or after) was also included as an exposure index. Results of the nested case-control study confirmed the findings of the original cohort study. That is, exposure to gasoline at the levels experienced by this cohort of distribution workers is not a significant risk factor for leukemia (all cell types), acute myeloid leukemia, kidney cancer or multiple myeloma.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:
Gasoline studies have been conducted in the laboratory under a variety of test conditions with a range of fish and invertebrate species. An even more extensive database is available on the aquatic toxicity of individual aromatic constituents. The majority of published studies do not identify the type of gasoline evaluated, or even provide distinguishing characteristics such as aromatic content or presence of lead alkyls. As a result, comparison of results among studies using open and closed vessels, different ages and species of test animals and different gasoline types, is difficult.

The bulk of the available literature on gasoline relates to the environmental impact of monoaromatic (BTEX) and diaromatic (naphthalene, methylnaphthalenes) constituents. In general, non-oxygenated gasoline exhibits some short-term toxicity to freshwater and marine organisms, especially under closed vessel or flow-through exposure conditions in the laboratory. The components which are the most prominent in the water soluble fraction and cause aquatic toxicity, are also highly volatile and can be readily biodegraded by microorganisms.

The 96-hour LC50 in rainbow trout (Oncorhynchus mykiss) is 2.7 mg/l (BTEX). The 48-hour LC50 in daphnia (Daphnia magna) is 3.0 mg/l (BTEX). The 96-hour LC50 in sheepshead minnow (Cyprinodon variegatus) is 8.3 mg/l (BTEX). The 96-hour LC50 in mysid shrimp (Mysidopsis bahia) is 1.8 mg/l

(BTEX).
ENVIRONMENTAL FATE:
Following spillage, the more volatile components of gasoline will be rapidly lost, with concurrent dissolution of these and other constituents into the water. Factors such as local environmental conditions (temperature, wind, mixing or wave action, soil type, etc), photo-oxidation, biodegradation and adsorption onto suspended sediments, can contribute to the weathering of spilled gasoline. The aqueous solubility of non-oxygenated unleaded gasoline, based on analysis of benzene, toluene, ethylbenzene-xylenes and naphthalene, is reported to be 112 mg/l. Solubility data on individual gasoline constituents also available.

13. DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible.

This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by USEPA under RCRA (40CFR261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

14. TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT SHIPPING NAME: GASOLINE
DOT HAZARD CLASS: 3 (FLAMMABLE LIQUID)
DOT IDENTIFICATION NUMBER: UN1203
DOT PACKING GROUP: II

15. REGULATORY INFORMATION

SARA 311 CATEGORIES:

1.	Immediate (Acute) Health Effects:	YES
2.	Delayed (Chronic) Health Effects:	YES
3.	Fire Hazard:	YES
4.	Sudden Release of Pressure Hazard:	NO
5.	Reactivity Hazard:	NO

REGULATORY LISTS SEARCHED:

01=SARA 313	11=NJ RTK	22=TSCA Sect 5(a)(2)
02=MASS RTK	12=CERCLA 302.4	23=TSCA Sect 6
03=NTP Carcinogen	13=MN RTK	24=TSCA Sect 12(b)
04=CA Prop 65-Carcin	14=ACGIH TWA	25=TSCA Sect 8(a)
05=CA Prop 65-Repro Tox	15=ACGIH STEL	26=TSCA Sect 8(d)
06=IARC Group 1	16=ACGIH Calc TLV	27=TSCA Sect 4(a)
07=IARC Group 2A	17=OSHA PEL	28=Canadian WHMIS
08=IARC Group 2B	18=DOT Marine Pollutant	29=OSHA CEILING
09=SARA 302/304	19=Chevron TWA	30=Chevron STEL
10=PA RTK	20=EPA Carcinogen	

The following components of this material are found on the regulatory lists indicated.

BENZENE, ETHYL-
is found on lists: 01,02,03,10,11,12,13,14,15,17,26,28,
N-BUTANE
is found on lists: 02,10,11,13,14,28,
CYCLOHEXANE, METHYL
is found on lists: 02,10,11,13,14,17,26,28,
TOLUENE
is found on lists: 01,02,05,10,11,12,13,14,17,26,28,29,
N-HEXANE
is found on lists: 01,02,10,11,12,13,14,17,27,28,
CYCLOHEXANE
is found on lists: 01,02,10,11,12,13,14,17,26,28,
BENZENE, DIMETHYL-
is found on lists: 01,02,10,11,12,13,14,15,17,
N-HEPTANE
is found on lists: 02,10,11,13,14,15,17,26,28,
2-METHOXY-2-METHYL PROPANE
is found on lists: 01,02,10,11,12,14,24,26,27,30,
BENZENE, TRIMETHYL-
is found on lists: 02,10,11,13,14,26,28,
2,2,4-TRIMETHYLPENTANE
is found on lists: 02,10,11,12,26,
2-ETHOXY-2-METHYL PROPANE
is found on lists: 25,26,
ETHYL ALCOHOL
is found on lists: 02,10,11,13,14,17,28,
BENZENE
is found on lists: 01,02,03,04,06,10,11,12,13,14,15,17,20,28,29,
2-METHOXY-2-METHYL-BUTANE
is found on lists: 24,25,26,27,30,
GASOLINE (GENERIC)
is found on lists: 04,08,14,15,17,
PENTANES
is found on lists: 14,15,17,
HEXANES
is found on lists: 14,15,

WHMIS CLASSIFICATION:
Class B, Division 2: Flammable Liquids
Class D, Division 2, Subdivision A: Very Toxic Material
-Carcinogenicity
Class D, Division 2, Subdivision B: Toxic Material
-Skin or Eye Irritation

16. OTHER INFORMATION

NFPA RATINGS: Health 1; Flammability 3; Reactivity 0;
HMIS RATINGS: Health 1; Flammability 3; Reactivity 0;
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT:
This revision updates Sections 1 (Add Product Numbers).

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	TPQ - Threshold Planning Quantity
RQ - Reportable Quantity	PEL - Permissible Exposure Limit
C - Ceiling Limit	CAS - Chemical Abstract Service Number
A1-5 - Appendix A Categories	() - Change Has Been Proposed
NDA - No Data Available	NA - Not Applicable

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the Toxicology and Health Risk Assessment Unit, CRTC, P.O. Box 1627, Richmond, CA 94804

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The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

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THIS IS THE LAST PAGE OF THIS MSDS

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