Boart Longyear Inc
Core Drilling Division
P.O. Box 330, 1111 Main Street West
North Bay, Ontario, Canada P1B 8H6
Telephone: (705) 474-2800
Facsimile: (705) 472-4998

BOART LONGYEAR

February 27, 2002

MR. IAN PIRIE
INMET MINING CORPORATION
#1000 – 330 BAY STREET
TORONTO, ON M5H 2S8

Dear Ian

As requested by Colin Burge, enclosed are MSDS sheets on additives we commonly use with water to make up the diamond drilling fluid.

Quick Gel	Bentonite clay with polymer added. Used to lift cuttings and form a filter cake on the wall of the hole. Typically used in unstable ground, overburden, etc. Not likely to be required at Izok Lake.
DD2000	Polymer viscosifier. Helps lift cuttings and lubricate drill string.
E-Z Mud	All-purpose polymer. Used in weak formations and has some of the same properties of the above two additives, but much less capable of forming wall-cake.
Polydrill 133X	Viscosifier in mineral oil emulsion. Recommended for use with Polydrill cutting separator due to flocculating properties.
Polydrill OBX	As above but recommended for overburden.
Drill Rod Grease	Not a fluid additive but is smeared on the rods and then partially rubs off onto the walls of the hole. Typically stays in the hole and does not resurface with cuttings. Required to lubricate the high speed rotation of the rods from the abrasion of the hole wall.

We would hope to drill the holes at Izok with water and rod grease only. However, if the sulphides are heavy and don't flush up well, we might need a viscosifier. Polydrill 133X might also help to flocculate and separate cuttings from the recycled fluid.

I trust this information is sufficient for your present requirements.

Yours truly,

BOART LONGYEAR INC.

Loris Pascoli
Manager, International

Enclosure

Kc

LSP976

NL BAROID ENVIRONMENTAL, SAFETY AND TRANSPORTATION DATA SHEET

BEST Sheet

GENERAL INFORMATION

1507

I PRODUCT IDENTIFICATION

SUPPLIER NL BAROID/NL INDUSTRIES, INC.	REGULAR TELEPHONE NO. EMERGENCY TELEPHONE NO. 713/527-1447
ADDRESS P.O. BOX 1675 HOUSTON, TEXAS 77001	
TRADE NAME QUIK-GEL®	
GENERIC DESCRIPTION HIGH YIELD BENTONITE; SODIUM MONTMORILLONITE	

II HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	%	HAZARD DATA
NONE		

III PHYSICAL DATA

BOILING POINT (°F) NA	MELTING POINT NA	FREEZING POINT NA
SPECIFIC GRAVITY (H_2O = 1) 2.5	VAPOR PRESSURE (mm Hg) NA	
VAPOR DENSITY (AIR = 1) NA	SOLUBILITY IN H_2O, % BY WT. NA	
% VOLATILES BY VOL. NA	EVAPORATION RATE (BUTYL ACETATE = 1) NA	
APPEARANCE AND ODOR GREY, TAN POWDER	Density @ 20°C: 41.6 lbs/ft³ (UNCOMPACTED)	
pH		

N/A = Not Applicable N/D = Not Determined

QUIK-GEL®

HEALTH HAZARD 1

FLAMMABILITY 0

REACTIVITY 0

Ratings based on NIOSH "Identification System for Occupationally Hazardous Materials" (1974)

BEST Sheet

IV FIRE AND EXPLOSION DATA

NOT FLAMMABLE OR EXPLOSIVE.

EXTINGUISHING MEDIA: WATER

V HEALTH HAZARD INFORMATION

ACUTE ORAL LD_{50} | ACUTE DERMAL LD_{50} | AQUATIC TOXICITY (LC_{50}) 10,000 mg/l

ROUTES OF EXPOSURE AND EFFECTS

TLV = 2 mg/m³

IRRITANT: EYES, NOSE, THROAT, LUNGS

PROLONGED INHALATION MAY CAUSE LUNG INJURY

TYPICAL ANALYSIS OF TOXIC ELEMENTS

As	1.5 ppm
Cd	0.25 ppm
Cr	1.0 ppm
Co	1.8 ppm
Pb	21.0 ppm
Hg	0.04 ppm
Ni	<1.0 ppm

EMERGENCY AND FIRST AID PROCEDURES

NORMAL PERSONAL HYGIENE.

BEST Sheet

VI REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY

STABLE

INCOMPATIBILITY

NONE

HAZARDOUS DECOMPOSITION PRODUCTS

NONE

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION

NONE

VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

NORMAL HOSUEKEEPING; CAUSES SLIPPERY SURFACES WHEN WET.

NEUTRALIZING CHEMICALS

NA

WASTE DISPOSAL METHOD

DISPOSE OF IN DESIGNATED LANDFILL.

VIII INDUSTRIAL HYGIENE CONTROL MEASURES

VENTILATION REQUIREMENTS

MECHANICAL

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY

USE A NIOSH APPROVED MECHANICAL FILTER RESPIRATOR FOR NONTOXIC DUSTS.

EYE

NONE REQUIRED

GLOVES

NONE REQUIRED

OTHER CLOTHING AND EQUIPMENT

BEST Sheet

IX SPECIAL PRECAUTIONS

PRECAUTIONARY STATEMENTS

RECOMMENDED LABELING:

FRONT PANEL: CAUTION
SEE BACK PANEL FOR CAUTION BEFORE USE

BACK PANEL: CAUTION
THIS PRODUCT CONTAINS FREE SILICA. PROLONGED INHALATION OF THE POWDER MAY RESULT IN LUNG DISEASE. AVOID CREATING DUSTY CONDITIONS AND USE A NIOSH APPROVED DUST RESPIRATOR.

OTHER HANDLING AND STORAGE REQUIREMENTS

DEPARTMENT OF TRANSPORTATION INFORMATION

PROPER SHIPPING NAME:

HAZARD CLASS: NOT HAZARDOUS

HAZARDOUS SUBSTANCE:

LABEL: NONE REQUIRED

PREPARED BY **NL Barold**
MARKETING TECHNOLOGY

DATE JANUARY 26, 1982

Material Safety Data Sheet

DD 2000

Material Identification and Use

MANUFACTURER'S NAME	Control Chemical (1989) Corporation
MANUFACTURER'S ADDRESS	7016 30 Street SE Calgary, Alberta, Canada T2C 1N9
EMERGENCY PHONE NUMBER	(403) 720-7044
SUPPLIER IDENTIFIER	
SUPPLIER'S ADDRESS	
SUPPLIER EMERGENCY PHONE NUMBER	
PRODUCT IDENTIFIER	DD 2000
PRODUCT USE	Drilling Mud - Co-polymer of Acrylamide and Sodium Acrylate

Hazardous Ingredients of Materials

...ical Identity	Concentration	CAS#/NA#/UN#	LD(50)	LC(50)

No regulated components.

This is not a WHMIS controlled product.

Physical Data For Product

PHYSICAL STATE	Solid
ODOUR AND APPEARANCE	Granular white solid. Faint odour.
ODOUR THRESHOLD	Not available
SPECIFIC GRAVITY	0.80
VAPOUR PRESSURE	Very low.
VAPOUR DENSITY (air=1)	Not applicable
EVAPORATION RATE	Not available
BOILING POINT	Decomposes
FREEZING POINT	Not applicable.
pH	Not applicable.
DENSITY (g/ml)	0.80
COEFFICIENT OF WATER/OIL DISTRIBUTION	Not available

Fire and Explosion Hazard of Product

CONDITIONS OF FLAMMABILITY.....	Requires a source of ignition, the presence of air, and a temperature greater than the flash point.
MEANS OF EXTINCTION.....	Use dry chemical, foam, or carbon dioxide. Water may cause excessive slipperiness.
FLASHPOINT AND METHOD OF DETERMINATION.....	No flash point.
UPPER EXPLOSION LIMIT(% BY VOL).	Not available
LOWER EXPLOSION LIMIT(% BY VOL).	Not available
AUTO-IGNITION TEMPERATURE.....	Not available
FLAMMABILITY CLASSIFICATION.....	Not available. Not a controlled product.
HAZARDOUS COMBUSTION PRODUCTS...	Not available
EXPLOSION DATA.....	Not available
SENSITIVITY TO STATIC DISCHARGE.	Not available

Reactivity Data

('ICAL STABILITY.....	Stable under normal conditions. Hazardous polymerization will not occur.
INCOMPATIBLE MATERIALS.....	Avoid strong oxidizing and reducing agents.
CONDITIONS OF REACTIVITY.....	Avoid contamination with reactive substances.
HAZARDOUS DECOMPOSITION PRODUCTS	Not available.

Toxicological Properties of Product

ROUTES OF ENTRY	
SKIN CONTACT.....	No effects of exposure expected due to contact Prolonged contact may cause skin irritation or dermatitis in some individuals.
SKIN ABSORPTION.....	No known hazard due to skin absorption.
EYE.....	No effects of exposure expected with the exception of possible irritation.
INHALATION.....	May cause sneezing, slight irritation of nose and throat.
INGESTION.....	
ACUTE OVER EXPOSURE EFFECTS.....	
CHRONIC OVER EXPOSURE EFFECTS...	Skin irritation or dermatitis may occur upon frequent or prolonged contact.
EXPOSURE LIMITS.....	TWAEV = 0.03 mg/m3 (skin) (Ont. Reg. 654/86).
IRRITANCY OF PRODUCT.....	Eye: mild irritant.
SENSITIZATION TO MATERIAL.....	Repeated or prolonged contact may cause sensitization in some individuals.

CARCINOGENICITY, REPRODUCTIVE EFFECTS.....	
TERATOGENICITY, MUTAGENICITY....	Not available.
TOXICOLOGICALLY SYNERGISTIC PRODUCTS.....	Not available.

Preventive Measures

PERSONAL PROTECTIVE EQUIPMENT...	Chemical goggles, impervious gloves, and protective clothing as required to prevent contact. Use a mechanical-filter respirator as required to prevent exposure.
SPECIFIC ENGINEERING CONTROLS...	General ventilation with a good source of make-up air recommended for all indoor situations.
LEAK AND SPILL PROCEDURES.....	Ventilate area. Wear rubber boots, gloves, and a self-contained breathing apparatus if ventilation is not adequate. Collect into waste container. Avoid raising dust. Wash spill site after material pickup. Water solutions are very slippery. May constitute a hazard following a spill.
WASTE DISPOSAL.....	Dispose of waste according to federal, provincial, and local regulations.
HANDLING PROCEDURES AND EQUIPMENT.....	Avoid prolonged or frequent contact when handling material. Do not inhale dust or breathe vapor. Wear a NIOSH approved mechanical-filter respirator, if adequate ventilation cannot be provided. Avoid skin or eye contact.
STORAGE REQUIREMENTS.....	Keep container closed when not in use. Store in cool and dry location away from oxidizing and reducing agents.
SPECIAL SHIPPING INFORMATION....	None

First Aid Measures

SPECIFIC FIRST AID PROCEDURES... Skin contact: wash exposed area with soap and water. If irritation or abnormalities persist, call a physician. Eye Contact: Immediately flush eyes with water for 15 minutes and call a physician. Inhalation: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician. Ingestion: Do not induce vomiting. If conscious, dilute by giving two glasses of water. Call a physician immediately.

Preparation Date of Material Safety Data Sheet

PREPARED BY..... Safety Committee
PHONE NUMBER OF PREPARER..... (403) 720-7044
PREPARED..... January 01,1997

The information contained herein is based on data believed to be reliable, but is presented without guaranty or warranty and Control Chemical (1989) Corporation disclaims any liability incurred from the use thereof.

NL BAROID ENVIRONMENTAL, SAFETY AND TRANSPORTATION DATA SHEET

BEST Sheet

GENERAL INFORMATION

1507

I PRODUCT IDENTIFICATION

SUPPLIER NL BAROID/NL INDUSTRIES, INC.	REGULAR TELEPHONE NO. EMERGENCY TELEPHONE NO. 713/527-1447
ADDRESS P.O. BOX 1675 HOUSTON, TEXAS 77251	
TRADE NAME EZ MUD™	
GENERIC DESCRIPTION POLYACRYLAMIDE/POLYACRYLATE	

II HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	%	HAZARD DATA
NONE		

III PHYSICAL DATA

BOILING POINT (°F) >200	MELTING POINT	FREEZING POINT
SPECIFIC GRAVITY (H_2O = 1) 1.03	VAPOR PRESSURE (mm Hg)	
VAPOR DENSITY (AIR = 1)	SOLUBILITY IN H_2O, % BY WT. 70	
% VOLATILES BY VOL. 65	EVAPORATION RATE (BUTYL ACETATE = 1) SLOW	
APPEARANCE AND ODOR CREAM COLORED LIQUID, SLIGHT HYDROCARBON ODOR	Density @ 20° C: 8.6 LBS/GAL	
pH 8.4		

N/A = Not Applicable N/D = Not Determined

EZ MUD™

HEALTH HAZARD	0
FLAMMABILITY	0
REACTIVITY	0

Ratings based on NIOSH "Identification System for Occupationally Hazardous Materials" (1974)

BEST Sheet

IV FIRE AND EXPLOSION DATA

FLASH POINT: >200°F

EXTINGUISHING MEDIA: DRY-CHEMICAL, FOAM, CO_2

V HEALTH HAZARD INFORMATION

ACUTE ORAL LD_{50}	ACUTE DERMAL LD_{50}	AQUATIC TOXICITY (LC_{50})
>5,000 mg/kg		1000 mg/l

ROUTES OF EXPOSURE AND EFFECTS

EYE: MAY CAUSE IRRITATION.
SKIN: MAY CAUSE IRRITATION.

EMERGENCY AND FIRST AID PROCEDURES

EYES: FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN.
SKIN: WASH WITH SOAP AND WATER AFTER USE.
INGESTION: INDUCE VOMITING. GIVE WATER. CALL A PHYSICIAN.

BEST Sheet

VI REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY

NONE

INCOMPATIBILITY

NONE

HAZARDOUS DECOMPOSITION PRODUCTS

EZ MUD IS NON FERMENTING.
NO HAZARDOUS DECOMPOSITION PRODUCTS ARE FORMED.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION

NONE

VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

CONTAIN SPILL WITH ABSORBENT MATERIAL. PLACE IN CONTAINER FOR DISPOSAL. FINAL CLEAN-UP WITH DETERGENT AND WATER UNTIL SLIPPERY CONDITION IS ELIMINATED.

NEUTRALIZING CHEMICALS

NON ARE REQUIRED

WASTE DISPOSAL METHOD

DISPOSE OF WASTE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
THE INCLUSION OF EZ MUD IN A DRILLING MUD WILL NOT CAUSE THE DRILLING MUD TO BE CLASSIFIED AS A HAZARDOUS WASTE.

VIII INDUSTRIAL HYGIENE CONTROL MEASURES

VENTILATION REQUIREMENTS

NONE

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY

NONE REQUIRED.

EYE

GOGGLES.

GLOVES

RUBBER

OTHER CLOTHING AND EQUIPMENT

NONE

BEST Sheet

IX SPECIAL PRECAUTIONS

PRECAUTIONARY STATEMENTS

DO NOT TAKE INTERNALLY.
AVOID SKIN AND EYE CONTACT.
IF SPILLED MAY CAUSE SLIPPERY FLOOR CONDITIONS.

OTHER HANDLING AND STORAGE REQUIREMENTS

DEPARTMENT OF TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: NONE

HAZARD CLASS: NOT HAZARDOUS

HAZARDOUS SUBSTANCE: NONE

PREPARED BY **NL Baroid**
MARKETING TECHNOLOGY

DATE AUGUST 18, 1982

poly-drill.com

home
filtering drill water
on-site gallery
drilling fluids
the oil patch
technical data
history
equipment
contacts

Material Safety Data Sheet/Fiche Signaletique

Poly-Drill 133X

Section 1--Product Identification

Product Trade Name(s): Poly-Drill 133X

Product Description: Latex polyelectrolyte

Updated: January 7, 2000

Section 2--Composition

A liquid copolymer blend of polyacrylamide, water, surfactant(s) and mineral oil: evaluation of the ingredient(s) has found no ingredient(s) hazardous as per WHMIS regulations.

Section 3--Physical data

Boiling Point: Not available Specific Gravity (@ 25 Deg. C.): 1.09

Solubility in Water: solubility by solution viscosity. pH: 8.1 (1.0% solution)

Density (g/ml): 1.08 at 25 °C Physical state: liquid

Appearance and odor: Blue. Odor slight.

Section 4--Fire and Explosion data

Flash Point (method used): (PMCC)>100°C

Conditions of flammability: Intense heart, open flame.

Hazardous combustion products: Products of incomplete hydrocarbon

combustion.

Upper and lower flammable limits: Not available.

Extinguishing media: Use water spray, foam, dry chemical, or carbon dioxide.

Section 5--Reactivity

Chemical stability: stable under normal conditions

Hazardous Polymerization: will not occur

Incompatible substances: avoid strong oxidizing and reducing agents

Hazardous decomposition products: carbon monoxide, carbon dioxide, and products of incomplete hydrocarbon combustion.

Section 6--Health Hazard Data

TOXICITY RATING: Practically non-harmful

Routes of exposure and effects:

SKIN: Slight irritant: prolonged contact may cause skin irritation or dermatitis in some individuals

EYE: No effects of exposure expected with the exception of possible irritation.

INHALATION: If misted, no effects of exposure are expected.

Exposure limits: TLV-TWA: Mineral oil, mist 5mg/m^3

Carcinogenicity: None of the components of this product are listed as carcinogens by IARC and ACGIH

Sensitization of product: Not suspected to be a sensitizer.

Teratongenicity: Not available.

Mutagenicity: Not available.

Section 7--Emergency and First Aid Procedures

SKIN: Wash exposed area with soap and water. If irritation or abnormalities persist, call a physician

EYE: Immediately flush eyes with water for 15 minutes, if irritation or abnormalities persist, call a physician

INHALATION: Remove to fresh air. If breathing becomes difficult, give oxygen and call a physician

INGESTION: Do NOT induce vomiting: Call a physician immediately

Section 8--Handling and Use Precautions

Storage requirements: keep container closed when not in use. Store in a cool dry location away from oxidizing and reducing agents.

Waste Disposal: product should be disposed of in accordance with applicable local, Provincial and Federal regulations.

Steps must be taken if product is released or spilled: clean spill areas thoroughly to avoid hazardous slippery conditions.

Section 9--Industrial Hygiene Control Measures

Respiratory Protection: None normally required.

Ventilation: If mist and/or vapors are present, use air purifying respirator of self-contained breathing apparatus, but this is rarely required.

Eye Protection: Safety glasses, if personally preferred.

Gloves: Generally not necessary. Personal preference.

Section 10--Toxicological Properties

A LC50-96 Pass/Fail Bioassay test. This test determines the lethality of a fluid on young aquatic organisms. The fluid fails if 50% or more of the animals are dead after 96 hours in the fluid.

i. 96 hour static acute LC50 to Rainbow Trout = Greater than 1,000 mg/L After 96 hours, no observed effect, concentration = 125 mg/L based on no mortality or abnormal effects.

ii. 96 hour static acute LC50 to Sheepshead Minnow = Greater than 1,000 mg/L After 96 hours, no observed effect, concentration = 1,000 mg/L (highest concentration tested) based on no mortality or abnormal effects.

iii. 96 hour static acute LC50 to Mysid Shrimp = 400

mg/L After 96 hours, no observed effect, concentration = 180 mg/L based on no mortality or abnormal effects.

iv. 96 hour static acute LC50 to Daphnia Magna = 400 mg/L After 96 hours, no observed effect, concentration = 56 mg/L (lowest concentration tested) based on no mortality or abnormal effects.

Microtoxicity

Test Method: Luminescent Bacteria, IC50@ 15 minutes Reference: Appendix 1: Microtox Bioassay Procedure, Drilling Waste Management, Guide G50. 1993. Alberta Energy and Utilities Board, Calgary, AB, Canada. Sample: Poly-Drill 1330, sample #97324-1 for test #970723, 97/05/09 by D. Lintott Preparation: Sample was diluted to 2 g/L, which formed thick, slightly cloudy liquid. The sample was then centrifuged for 1 hour.

Test Results:

SAMPLE	TREATMENT	%CTL	1C20%	IC50%	RESULT
97324-1	None	N/A	14 (9-22)	>91	PASS

Section 11--Department of Transportation Information

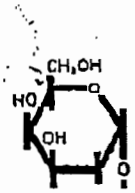
Shipping Name: Drilling Mud

Hazard Class: Not hazardous

Hazardous Substances: None

Cautionary Labeling: None required.

HOME



Poly-Drill Drilling Systems
1824 - 104 Avenue, S.W.
Calgary, Alberta, Canada
T2W-OA8
(403) 259-5112 FAX (403) 255-7185

ATTN: PETE

MATERIAL SAFETY DATA SHEET/FICHE SIGNALETIQUE

Section 1—PRODUCT IDENTIFICATION

PRODUCT TRADE NAME(S): Poly Drill O.B.X. WHMIS CLASSIFICATION: Non-regulated
TDG Classification: Non dangerous goods

SECTION 2—COMPOSITION

A liquid polymer containing guar gum, mineral oil, vegetable oil, acrylamide copolymer and a surfactant: Evaluation of the ingredient(s) has found no ingredient(s) hazardous as per WHMIS regulations.

SECTION 3—PHYSICAL DATA

Boiling Point: Not available
Specific Gravity: 0.9 g/cm
Solubility in Water: disperses in water(forms viscous, slippery solution).
pH: 3.8 (1% concentration)
Density (g/ml): Not available
Physical State: Liquid
Appearance and Odor: Brown. Odor slight.

SECTION 4—FIRE AND EXPLOSION DATA

Flash Point (method used): (PMCC) greater than 100 C.
Conditions of flammability: Very low risk.
Hazardous combustion products: None known.
Upper and Lower flammable limits: Not available.
Extinguishing media: Carbon dioxide, dry chemicals, foam, in preference to water spray

SECTION 5—REACTIVITY

Chemical stability: Stable under normal conditions.
Hazardous Polymerization: Will not occur.
Incompatible substances: Avoid strong oxidants such as liquid chlorine, concentrated oxygen, sodium or calcium hypochloride.
Hazardous decomposition products: None known

SECTION 6—HEALTH HAZARD DATA

TOXICITY RATING: Practically non-harmful.
Routes of Exposure and Effects:
SKIN: Slight irritant: prolonged contact may cause skin irritation or dermatitis in some individuals
EYE: No effects of exposure expected with the exception of possible irritation.
INHALATION: Due to low volatility of mineral distillates a small inhalation hazard exists.
INGESTION: can cause nausea, vomiting, cramps, diarrhea
Chronic exposure limits: None
Sensitization of product: Not suspected to be a sensitizer.
Teratongenicity: Not available.
Mutagenicity: Not available.

Carcinogenicity: None of the components of this product are listed as carcinogens by IARC and ACGIH

SECTION 7—EMERGENCY AND FIRST AID PROCEDURES

SKIN: Wash exposed area with soap and water. If irritation or abnormalities persist, call a physician.
EYE: Immediately flush eyes with water for 15 minutes, if irritation or abnormalities persist, call a physician.
INHALATION: Remove to fresh air. If breathing becomes difficult, give oxygen and call a physician.
INGESTION: Don not induce vomiting: Call a physician immediately.

SECTION 8—HANDLING AND USE PRECTIONS

Storage requirements: keep container closed when not in use. Store in a cool dry location away from oxidizing and reducing agents.
Waste Disposal: product should be disposed of in accordance with applicable local, Provincial and Federal regulations.
Steps must be taken if product is released or spilled: clean spill areas thoroughly to avoid hazardous slippery conditions.

SECTION 9—INDUSTRIAL HYGIENE CONTROL MEASURES

Respiratory Protection: None normally required.
Ventilation: If mist and/or vapors are present, use air purifying respirator of self-contained breathing apparatus, but this is rarely required.
Eye Protection: Safety glasses, if personally preferred
Gloves: Generally not necessary. Personal preference.

SECTION 10—TOXICOLOGICAL PROPERTIES

G50 Microtox Analysis prepared by HydroQual Laboratories, Calgary, AB—97/6/26 Test#970978:

Test Description	EC20	EC50	Pass/Fail
MTX	>91	>91	Pass

SECTION 11—DEPARTMENT OF TRANSPORTATION INFORMATION

Shipping Name: Drilling Mud
Hazard Class: Not hazardous
Hazardous Substances: None
Cautionary Labeling: None required

PETRO-CANADA

Material Safety Data Sheet

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

Section 1. Chemical Product and Company Identification

Product Name	DRILL ROD HEAVY GREASE
Code	650-265 File # W218
DSL	On the DSL.
Print Date:	11/5/97.
Supplier	Petro-Canada P.O. Box 2844 Calgary, Alberta T2P 3E3
Synonym	None
Chemical Name	Not applicable.
Chemical Family	Petroleum hydrocarbons
Chemical Formula	Not applicable.
In case of Emergency	Petro-Canada Emergency Number: (403) 296-3000 Canutec Transportation Emergency: (613) 996-6666 Poison Control Centre Numbers: Consult local telephone directory for emergency number(s).
Manufacturer	PETRO-CANADA P.O. Box 2844, Petro-Canada Centre Calgary, Alberta T2P 3E3
Material Uses	This product is a multi-purpose grease with a wide range of automotive and industrial lubricant applications.

Section 2. Composition/Information on Ingredients

		Exposure Limits (ACGIH)			
Name	CAS #	TLV-TWA(8 h)	STEL	CEILING	% (V/V)
Mixture of hydrotreated neutral base oil and additives	Not applicable	5 mg/m³ (oil mist)	Not applicable	Not applicable	100

Section 3. Hazards Identification

Potential Acute Health Effects	May irritate the eyes. Non irritating to skin but for prolonged use, protective gloves are recommended. 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, mists or fumes, inhalation of this product may cause irritation of the breathing passages. Low toxicity on ingestion; has laxative effect and rapidly eliminated. For more information, refer to Section 11.
Potential Chronic Health Effects	Prolonged or repeated contact with this product may cause skin irritation or inflammation, characterized by dermatitis, and oil acne. For more information, refer to Section 11.

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Do not use an eye ointment. Seek medical attention if irritation persists.
Skin Contact	Remove contaminated clothing - launder before reuse. Wash gently and thoroughly the contaminated skin with running water and non-abrasive soap. Get medical attention if redness or irritation occurs. High pressure grease gun is capable of injecting grease through the skin. Grease gun injuries require immediate physician assessment.
Inhalation	Evacuate the victim to a safe area as soon as possible. If the victim is not breathing, perform mouth-to-mouth resuscitation. Administer oxygen if available. Allow the victim to rest in a well ventilated area. Seek medical attention.
Hazardous Inhalation	No additional information.
Ingestion	DO NOT induce vomiting because of danger of aspirating liquid into lungs. Has laxative effect - rapidly eliminated. Physician assessment advised.
Hazardous Ingestion	No additional information.

Continued on Next Page

Section 5. Fire-fighting Measures

The Product is:	Class IIIB - combustible (NFPA).
Auto-Ignition Temperature	316°C (600.8°F)
Flash Points	OPEN CUP, 252°C (485.6°F) (Cleveland, ASTM D92)
Flammable Limits	Not available.
Products of Combustion	Carbon oxides (CO, CO2), nitrogen oxides (NOx), smoke and irritating fumes as products of incomplete combustion.
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, or drill empty containers.
Fire Fighting Media and Instructions	Cool containing vessels with water spray in order to prevent pressure build-up, autoignition or explosion. Shut off fuel to fire if it is possible to do so without hazard. SMALL FIRE: Use DRY chemicals, foam, or CO2. LARGE FIRE: Use water spray, fog or foam. WATER OR FOAM MAY CAUSE FROTHING. Avoid flushing spilled material into sewers, streams or other bodies of water. 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.
Special Remarks on Fire Hazards	No additional remark
Special Remarks on Explosion Hazards	No additional remark.

Section 6. Accidental Release Measures

Small Spill	Avoid contact. Contain spill. Use appropriate tools to put the spilled materials in a container for reclaiming or disposal. Check with applicable jurisdictions for specific disposal requirements of material and empty containers. DO NOT FLUSH TO SEWER.
Large Spill	No additional remark.

Section 7. Handling and Storage

Handling	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 and well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	For normal application, special ventilation is not necessary. If users operations generate fume 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	Wear safety glasses, safety shoes or boots. Wear long sleeved clothing to minimize skin contact. For casual contact, use natural rubber and PVC(polyvinyl chloride). For direct contact for more than 2 hours, NEOPRENE or NITRILE gloves are recommended. Respirator normally not necessary. If mist generated by heating, spraying, etc. wear an organic vapour respirator with a mist filter. All respirators must be NIOSH certified.
Personal Protection in Case of a Large Spill	No additional remarks
Exposure Limits	8-hour TLV-TWA of 5 mg/m³ recommended by Petro-Canada based on ACGIH TLV for oil mists. Consult local authorities for acceptable exposure limits.

Continued on Next Page

Section 9. Physical and Chemical Properties

Physical State and appearance	Paste of long fibred texture.
Dropping Point	>195°C (>383°F).
Penetration (@ 25°C)	245 (unworked), 220-250 (60 strokes).
Boiling Point	260°C (500°F)
Melting Point	Not available.
Specific Gravity	0.89 kg/L @ 15°C (Water = 1).
Vapor Pressure	0.0010 kPa @ 20°C (0.0075 mmHg @ 68°F).
Vapor Density	Not available.
Volatility	Semivolatile.
Odor Threshold	Not available.
Oil / Water Dist. Coeff.	Not available.
Viscosity (@ 40 °C)	148-163 cSt.
Solubility	Insoluble in cold water, soluble in non-polar hydrocarbon solvents.

Odor	Mild grease like.
Taste	Not available.
Color	Greenish brown

Section 10. Stability and Reactivity

Stability	The product is stable under normal conditions of storage.
Instability Temperature	Not available.
Conditions to Avoid	Avoid excessive heat.
Incompatibility with Various Substances	Highly reactive with oxidizing agents.
Decomposition products:	COx, NOx, oxides of barium, smoke on combustion.
Corrosivity	Not applicable
Special Remarks on Reactivity	Peroxides, chlorine, strong acids, etc.
Special Remarks on Corrosivity	No additional remark.

Section 11. Toxicological Information

Routes of Entry	Skin contact, eye contact, inhalation, and ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 5000 mg/kg (rat).
Chronic Effects on Humans	Prolonged or repeated contact with this product may cause skin irritation or inflammation, characterized by dermatitis, and oil acne. For more information, refer to Section 11.
Other Toxic Effects on Humans	May irritate the eyes. Non irritating to skin but for prolonged use, protective gloves are recommended. 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, mists or fumes, inhalation of this product may cause irritation of the breathing passages. Low toxicity on ingestion; has laxative effect and rapidly eliminated. For more information, refer to Section 11.
Special Remarks on Toxicity to Animals	Based on toxicity of severely hydrotreated paraffinic oil only. Severely hydrotreated base oils are negative when tested by the modified Ames test. Propane-deasphalted residual oils are also negative in the sister chromatid exchange in chinese hamster ovary cells and in the mouse lymphoma forward mutation assay.
Special Remarks on Chronic Effects on Humans	Based on toxicity of hydrotreated paraffinic based oils only. Hydrotreated based oils give negative results when tested for: (a) in vitro cytogenetic assay measuring sister chromated exchange frequencies in Chinese hamster ovary cells; (b) determination of the mutagenic activity towards Salmonella Typhimurium TA 98 using the Modified Ames Assay.
Special Remarks on Other Toxic Effects on Humans	No additional remark.

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Section 12. Ecological Information

Ecotoxicity	No studies were found.
BOD5 and COD	No studies were found.
Products of Biodegradation	No studies were found.
Toxicity of the Products of Biodegradation	No studies were found.
Special Remarks on the Products of Biodegradation	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.

Section 14. Transport Information

TDG Classification	Not controlled under TDG (Canada).
Special Provisions for Transport	No additional remark.

Section 15. Regulatory Information and Pictograms

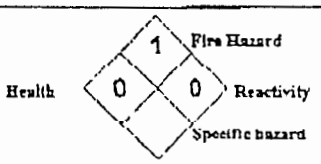
Other Regulations	All components of this formulation are listed in the Domestic Substances List (DSL-Canadian) and in the Toxic Substances Control Act Inventory (TSCA-U.S.). This product is not known to contain any of the carcinogens required to be listed under OSHA hazard communication standard, 29 CFR 1910.1200 (U.S.). Not listed in EPCRA or SARA Title III, Section 313, Toxic Chemicals (40 CFR 355). Not listed in CERCLA (40 CFR 302.40). Please note that the chemical identity of some or all of the ingredients that may be listed herein is confidential business information and is being withheld as permitted by 29 CFR 1910.1200 and various State Right to Know Laws.	
Other Classifications	WHMIS (Canada)	Not controlled
	DSD/DPD (EEC)	Not classified under the Dangerous Substances or Dangerous Preparations Directives.

WHMIS (Canada) (Pictograms)

HMIS (U.S.A.)

Health Hazard	0
Fire Hazard	1
Reactivity	0
Personal Protection	a

NFPA (U.S.A.)



DSD/DPD (Europe) (Pictograms)

TDG (Canada) (pictograms)

DOT (U.S.A) (Pictograms)

Continued on Next Page

Protective Clothing (Pictograms)

Section 16. Other Information

References	Available upon request.
Other Special Considerations	No additional remark.
Prepared by May on 5/7/96.	Data entry by May Chau. Print Date: 11/5/97.
Information Contact	Petro-Canada Product Safety Coordinator (403) 296-4410

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Shell Canada Limited

Material Safety Data Sheet

Effective Date: 2001-03-09
Supersedes: 2001-01-08

Class B2 Flammable Liquid

Class D2B Other Toxic Effects - Skin Irritant

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT:	**SHELL AVGAS 100 LL**
SYNONYMS:	AVIATION GASOLINE
PRODUCT USE:	Fuel
MSDS Number:	101-200

MANUFACTURER
Shell Canada Limited
P.O. Box 100, Station M
400-4th Ave. S.W.
Calgary, AB Canada
T2P 2H5

TELEPHONE NUMBERS	
Shell Emergency Number	1-800-661-7378
CANUTEC 24 HOUR EMERGENCY NUMBER	613-996-6666
For general information:	1-800-661-1600
For MSDS information:	403-691-3982
(From 7:30 to 4:30 Mountain Time)	403-691-2220

This MSDS was prepared by the Toxicology and Material Safety Section of Shell Canada Limited.

*An asterisk in the product name designates a trade-mark(s) of Shell Canada Limited, used under license by Shell Canada Products.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS Number	% Range	WHMIS Controlled	CBI Claim No. CBI Date
Naphtha (Petroleum), Light Alkylate	64741-66-8	70 - 90	Yes	
Toluene	108-88-3	10 - 30	Yes	

See Section 8 for Occupational Exposure Guidelines.

3. HAZARDS IDENTIFICATION

Physical Description: Liquid Blue Colour Clear Typical Gasoline Odour

Firefighting Instructions	Extremely flammable. Vapour forms a flammable/explosive mixture with air between upper and lower flammable limits. Vapours may travel along ground and flashback along vapour trail may occur. Product will float and can be reignited on surface of water. Do not use water except as a fog. Use water to cool fire exposed containers. Containers exposed to intense heat from fires should be cooled with water to prevent vapour pressure buildup which could result in container rupture. Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure. Always stay away from ends of containers due to explosive potential. Fight fire from maximum distance. Do not enter confined fire space without adequate protective clothing and an approved positive pressure self-contained breathing apparatus. Flashback may occur along vapour trail.
Hazardous Combustion Products	Carbon dioxide, carbon monoxide and unidentified organic compounds may be formed upon combustion.

6. ACCIDENTAL RELEASE MEASURES

Issue warning "Flammable". Eliminate all ignition sources. Isolate hazard area and restrict access. Handling equipment must be grounded. Try to work upwind of spill. Avoid direct contact with material. Saturated clothing should be immediately removed to avoid flammability hazard. Wear appropriate breathing apparatus (if applicable) and protective clothing. Stop leak only if safe to do so. Dike and contain land spills; contain water spills by booming. Use water fog to knock down vapours; contain runoff. Absorb residue or small spills with absorbent material and remove to non-leaking containers for disposal. Recommended materials: Clay or Sand Spill area must be cleaned and restored to original condition or to the satisfaction of authorities. Dispose of recovered material as noted under Disposal Considerations. Explosion and fire is the most immediate problem. Notify appropriate environmental agency(ies).

7. HANDLING AND STORAGE

Handling:	Extremely flammable. Avoid excessive heat, sparks, open flames and all other sources of ignition. Fixed equipment as well as transfer containers and equipment should be grounded to prevent accumulation of static charge. Vapours are heavier than air and will settle and collect in low areas and pits, displacing breathing air. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapours are gone. Vapours may accumulate and travel to distant ignition sources and flashback. Do not cut, drill, grind, weld or perform similar operations on or near containers. Empty containers are hazardous, may contain flammable/explosive dusts, residues or vapours. Never siphon by mouth. Do not use as a cleaning solvent. Wash with soap and water prior to eating, drinking, smoking, applying cosmetics or using toilet facilities. Launder contaminated clothing prior to reuse. Use good personal hygiene.
Storage:	Use explosion-proof ventilation to prevent vapour accumulation. Keep container tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

THE FOLLOWING INFORMATION, WHILE APPROPRIATE FOR THIS PRODUCT, IS GENERAL IN NATURE. THE SELECTION OF PERSONAL PROTECTIVE EQUIPMENT WILL VARY DEPENDING ON THE CONDITIONS OF USE.

10. STABILITY AND REACTIVITY

Chemically Stable:	Yes
Hazardous Polymerization:	No
Sensitive to Mechanical Impact:	No
Sensitive to Static Discharge:	Yes
Incompatible Materials:	Avoid strong oxidizing agents.
Conditions of Reactivity:	Avoid excessive heat, open flames and all ignition sources.

11. TOXICOLOGICAL INFORMATION

Ingredient (or Product if not specified)	**Toxicological Data**
Naphtha (Petroleum), Light Alkylate	LC50 Inhalation Rat >11000 mg/m3 for 4hours LD50 Dermal Rat >4000 mg/kg LD50 Oral Rat >8000 mg/kg
Toluene	LD50 Oral Rat = 5000 mg/kg LC50 Inhalation Rat = 8000 ppm for 4 hours LD50 Dermal Rabbit = 14000 mg/kg

Routes of Exposure:	Exposure may occur via inhalation, ingestion, skin absorption and skin or eye contact.
Formulation:	This product contains n-hexane.
Irritancy:	This product is expected to be irritating to skin but is not predicted to be a skin sensitizer.
Chronic Effects:	Prolonged and repeated contact with skin can cause defatting and drying of the skin resulting in skin irritation and dermatitis. Prolonged or repeated exposure to high vapour concentration or ingestion can cause headache, nausea, dizziness, and central nervous system depression, and in rare cases may sensitize heart muscles causing heart arrythmia. Peripheral neurotoxicity has been reported in connection with over exposure to n-hexane. This product contains low levels of lead. Chronic, low grade exposure to lead compounds could lead to insomnia, anorexia, nausea and vomiting, diarrhea, anemia, sensory loss and muscular weakness.
Pre-existing Conditions:	Pre-existing eye, skin and respiratory disorders may be aggravated by exposure to this product.

12. ECOLOGICAL INFORMATION

Environmental Effects	Do not allow product or runoff from fire control to enter storm or sanitary sewers, lakes, rivers, streams, or public waterways. Block off drains and ditches. Provincial regulations require and federal regulations may require that environmental and/or other agencies be notified of a spill incident. Spill area must be cleaned and restored to original condition or to the satisfaction of authorities. May be harmful to aquatic life. Fish Toxicity: 5 to 40 ppm | 96 hr TLm | Rainbow Trout | Freshwater
Biodegradability	Not available. Rapid volatilization.

13. DISPOSAL CONSIDERATIONS

Revisions:	This revision reflects the change of name from Shell Canada Products Limited to Shell Canada Products. This MSDS has been reviewed and updated. Changes have been made to: Section 3 Section 11

Shell Canada Limited

Material Safety Data Sheet

Effective Date: 2001-01-08
Supersedes: 2000-09-22

Class B2 Flammable Liquid

Class D2B Other Toxic Effects - Skin Irritant

Class D2A Other Toxic Effects - Carcinogen

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT:	**SHELL JET B**
SYNONYMS:	WIDE BOILING RANGE AVIATION TURBINE FUEL
PRODUCT USE:	Fuel
MSDS Number:	141-012

MANUFACTURER	**TELEPHONE NUMBERS**	
Shell Canada Limited	**Shell Emergency Number**	1-800-661-7378
P.O. Box 100, Station M	**CANUTEC 24 HOUR EMERGENCY NUMBER**	613-996-6666
400-4th Ave. S.W.		
Calgary, AB Canada	For general information:	1-800-661-1600
T2P 2H5	For MSDS information:	403-691-3982
	(From 7:30 to 4:30 Mountain Time)	403-691-2220

This MSDS was prepared by the Toxicology and Material Safety Section of Shell Canada Limited.

*An asterisk in the product name designates a trade-mark(s) of Shell Canada Limited, used under license by Shell Canada Products.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS Number	% Range	WHMIS Controlled	CBI Claim No. CBI Date
Naphtha (Petroleum), Full-range Reformed	68919-37-9	>95	Yes	
Benzene	71-43-2	0.5 - 1.5	Yes	

See Section 8 for Occupational Exposure Guidelines.

3. HAZARDS IDENTIFICATION

Physical Description: Liquid Bright Clear Typical Gasoline Odour

Firefighting Instructions	Extremely flammable. Vapour forms a flammable/explosive mixture with air between upper and lower flammable limits. Vapours may travel along ground and flashback along vapour trail may occur. Do not use water except as a fog. Use water to cool fire exposed containers. Product will float and can be reignited on surface of water. Containers exposed to intense heat from fires should be cooled with water to prevent vapour pressure buildup which could result in container rupture. Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure. Always stay away from ends of containers due to explosive potential. Fight fire from maximum distance. Do not enter confined fire space without adequate protective clothing and an approved positive pressure self-contained breathing apparatus.
Hazardous Combustion Products	A complex mixture of airborne solid, liquid, particulates and gases will evolve when this material undergoes pyrolysis or combustion. Carbon dioxide, carbon monoxide and unidentified organic compounds may be formed upon combustion.

6. ACCIDENTAL RELEASE MEASURES

Issue warning "Flammable". Eliminate all ignition sources. Handling equipment must be grounded. Isolate hazard area and restrict access. Try to work upwind of spill. Avoid direct contact with material. Saturated clothing should be immediately removed to avoid flammability hazard. Wear appropriate breathing apparatus (if applicable) and protective clothing. Stop leak only if safe to do so. Dike and contain land spills; contain water spills by booming. Use water fog to knock down vapours; contain runoff. For large spills remove by mechanical means and place in containers. Absorb residue or small spills with absorbent material and remove to non-leaking containers for disposal. Recommended materials: Clay or Sand Flush area with water to remove trace residue. Dispose of recovered material as noted under Disposal Considerations. Notify appropriate environmental agency(ies).

7. HANDLING AND STORAGE

Handling:	Extremely flammable. Avoid excessive heat, sparks, open flames and all other sources of ignition. Fixed equipment as well as transfer containers and equipment should be grounded to prevent accumulation of static charge. Vapours are heavier than air and will settle and collect in low areas and pits, displacing breathing air. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapours are gone. Vapours may accumulate and travel to distant ignition sources and flashback. Do not cut, drill, grind, weld or perform similar operations on or near containers. Empty containers are hazardous, may contain flammable/explosive dusts, residues or vapours. Do not pressurize drum containers to empty them. Never siphon by mouth. Wash with soap and water prior to eating, drinking, smoking, applying cosmetics or using toilet facilities. Launder contaminated clothing prior to reuse. Use good personal hygiene.
Storage:	Use explosion-proof ventilation to prevent vapour accumulation. Keep container tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

THE FOLLOWING INFORMATION, WHILE APPROPRIATE FOR THIS PRODUCT, IS GENERAL IN NATURE. THE SELECTION OF PERSONAL PROTECTIVE EQUIPMENT WILL VARY DEPENDING ON

Partition Coefficient (K_{ow}):	Not available
Water Solubility:	Insoluble
Other Solvents:	Hydrocarbon Solvents

10. STABILITY AND REACTIVITY

Chemically Stable:	Yes
Hazardous Polymerization:	No
Sensitive to Mechanical Impact:	No
Sensitive to Static Discharge:	Yes
Hazardous Decomposition Products:	Thermal decomposition products are highly dependent on combustion conditions.
Incompatible Materials:	Avoid contact with strong oxidizing agents and acids.
Conditions of Reactivity:	Avoid excessive heat, open flames and all ignition sources.

11. TOXICOLOGICAL INFORMATION

Ingredient (or Product if not specified)	**Toxicological Data**
Naphtha (Petroleum), Full-range Reformed	LD50 Oral Rat >28 mL/kg
Benzene	LD50 Oral Rat = 930 - 5600 mg/kg
	LC50 Inhalation Rat = 13700 ppm for 4 hours

Routes of Exposure:	Exposure may occur via inhalation, ingestion, skin absorption and skin or eye contact.
Irritancy:	This product is expected to be irritating to skin but is not predicted to be a skin sensitizer.
Chronic Effects:	Prolonged and repeated contact with skin can cause defatting and drying of the skin resulting in skin irritation and dermatitis. Prolonged exposure to high vapour concentration can cause headache, dizziness, nausea, blurred vision and central nervous system depression. Prolonged and repeated exposure may cause serious injury to blood forming organs, resulting in anemia and similar conditions.
Pre-existing Conditions:	Pre-existing eye, skin and respiratory disorders may be aggravated by exposure to this product.
Carcinogenicity and Mutagenicity:	This product contains benzene. Epidemiological studies indicate that long term inhalation of benzene vapour can cause leukaemia in man. Benzene has also produced chromosomal aberrations in peripheral blood lymphocytes. Carcinogenic hazard.

12. ECOLOGICAL INFORMATION

Environmental Effects	Do not allow product or runoff from fire control to enter storm or sanitary sewers, lakes, rivers, streams, or public waterways. Block off drains and ditches. Provincial regulations require and federal regulations may require that environmental and/or other agencies be notified of a spill incident. Spill area must be cleaned and restored to original condition or to the satisfaction of authorities. May be harmful to aquatic life. May cause physical fouling of aquatic organisms.
Biodegradability	Not readily biodegradable. Potential for bioaccumulation.

First Aid Statement :	Wash contaminated skin with soap and water. Flush eyes with water. If overcome by vapours remove to fresh air. Do not induce vomiting. Obtain medical attention.
Revisions:	This revision reflects the change of name from Shell Canada Products Limited to Shell Canada Products. This MSDS has been reviewed and updated.