

Material Safety Data Sheet

WHMIS (Pictograms)	WHMIS (Classification)	Protective Clothing	TDG (pictograms)
	B-3, D-2B	38	A

Product Name	DIESEL FUEL	Code	W104 SAP: 120, 121, 122, 287
Synonym Di	Diesel 50, Diesel 50 i.S. #1 Diesel , #1 Diesel LS, Diesel LG, Seasonal Diesel,	Validated on 3/2/2001.	
oynonym	Seasonal Diesel LS, Diesel AA, Domestic Marine Diesel, International marine Diesel, Seasonal Diesel Locomotive, Domestic Marine diesel LS, diesel -20°C (L%, LSD, Low Sulphur Diesel, dyed diesel, marked diesel, coloured diesel.		
Manufacturer	PETRO-CANADA P.Q. Box 2844 Cabery, Alberta T2P 3E3	In case of Emergency	Petro-Canada: 403-296-3000 Cenutec Transportation: 613-996-6666 Poison Control Centre: Consult local telephone directory for
Material Uses	Diesel fuels are distillate fuels suitable for use in high and medium speed internal combustion engines of the compression ignition type.		emergency number(s).

				EX	Exposure Links (ACGII-9		
	Name	CAS#	% (V/V)	TLV-TWA(8 h)	STEL	CEILING	
	0% maximum (benzene: nli), Clange (2000): 100 mg/m³, skin,	68334-30-6 Not available	>99.9 <0.1	Not established* Not established	Not established Not established	Not established Not established	
Manufacturer Recommendation	Not applicable						

Section 3. Hazards	dent/floation.
Effects	Eye contact may cause mild eye irritation. Skin contact can cause moderate to severe irritation and produce drying, aracking, or defatting dermatitis. Inhalation of vapours can cause CNS depression with symptoms of neuses, headeches, varniting, dizziness, fatigue, light-headedness, reduced coordination, unconciousness 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. Flist?	ud Messures
Eye Contact	MMEDIATELY flush syes with running water for at least 15 minutes, keeping eyelids open. Seek medical attention.
Skin Contact	Ramove contaminated clothing - Isunder 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 ventified 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

Flammability	Class II - combustible figuid (NFPA).	Flammable Limits	LOWER: 0.7%, UPPER: 6%
Flash Points	Diesel Fuel: Clased 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		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 exides (CO, CO2), nitrogen exides (NOx), smoke and irritating vapours as products of incomplete.		sulphur compounds (H2S), water vapour (H2O),

DIESEL FUEL	Page Mumber: 2
Pire Fighting	AERG96, GUIDE 128, Flammable liquids (Non-polar/Water-Immiscible). AUTION: This product has a moderate flash point above 40°C; Use of water spray when flighting fire may be inefficient.
	tank, rall 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.
	MALL FIRES: Dry chemical, CO2, water spray or regular foam. UARGE FIRES: Water spray, fog or regular foam. Do not use straight streams. Move containers from fire area if you can do If without risk.
	দীres Involving Tanks or Car/Treller Loads: Fight fire from maximum distance or use unmanned hose holders or monitor riozzles. ই
	cool containers with flooding quantitles of water until well after fire is out. Withdraw immediately in case of rising sound from venting devices or any discolouration 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.
Sortion & Accidon	al Release Measures
Material Release	NAERG86, GUIDE 128, Flammable Liquids (Non-polar) Water-immiscible).
or Spill	ELIMINATE ALL IGNITION SOURCES. Avoid contact. Stop leak if without risk. Contain spill. Absorb with inert absorbents, dry clay, or dialomaceous earth. Avoid inhaling dust of diatomaceous earth for it may contain silica in very fine particle size, anaking 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
	sporopiale authorities immediataly.
Section 7. Handling	appropriate guthorities immediately.
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	spropriate outhorities immediately. Storage: 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.
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Storage Section & Exposur	spropriate authorities immediately. Aurof Storage. 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 sultable 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. Store in tightly closed containers in cool, dry, isolated, well-ventilated area, and away from incompatibles. Ground all equipment containing material.
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Storage Section & Exposur Engineering Controls	Rep 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. Store in tightly closed containers in cool, dry, isolated, well-ventilated area, and away from incompatibles. Ground all equipment containing material. Controls/Personal Protection. For normal application, special ventilation is not necessary. If user's operations generate vapours or mist, use ventilation to teep exposure to airborne contaminants below the exposure limit. Make-up air should strays be supplied to balance air emoved by exhaust ventilation. Ensure that events station and safety shower close to ways station. The selection of personal protective equipment varies, depending upon conditions of use. Eye protection (i.e., safety glasses, safety goggles and/or face shield) should be determined based on conditions of use.
Storage Section & Exposur Engineering Controls Personal Protection - Eyes	Reep 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. Store in tightly closed containers in cool, dry, isolated, well-ventilated area, and away from incompatibles. Ground all equipment containing material. Controls/Personal Protection. For normal application, special ventilation is not necessary. If user's operations generate vapours or mist, use ventilation to leep exposure to airborne contaminants below the exposure limit. Make-up air should always be supplied to balance air emoved by exhaust ventilation. Ensure that eyewash station and safety shower are close to work-station. The selection of personal protective equipment varies, depending upon conditions of use. By protection [i.e., safety glasses, safety goggles and/or face shield) should be determined based on conditions of use.
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Storage Section & Exposur Engineering Controls Personal Protection - Eyes Body	surd Storage: 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. Store in tightly closed containers in cool, dry, isolated, well-ventilated area, and away from incompatibles. Ground all equipment containing material. **ControlsiPersonal Protection.** For normal application, special ventilation is not necessary. If user's operations generate vapours or mist, use ventilation to teep exposure to airborne contaminants below the exposure limit. Make-up air should always be supplied to balance all removed by exhaust ventilation. Ensure that eyewash station and safety shower are close to work-station. The selection of personal protective equipment varies, depending upon conditions of use. By protection (i.e., safety glasses, safety goggles and/or face shield) should be determined based on conditions of use. By protection (i.e., safety glasses, safety goggles and/or face shield) should be determined based on conditions of use. By protection (i.e., safety glasses, safety goggles and/or face shield) should be determined based on conditions of use. Wear appropriate clothing to prevent skin contact. As a minimum long sleeves and trousers should be worn. Where concentrations in air mey 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.

Physical State and Appearance	Engit oily liquid.	Viscosity	1.3-4.1 cSt @ 40°C (104°F)
Colour	dear to yellow / brown. Low sulphur diesel feels (<0.05 wt % sulphur) are colourless to light yellow (and may be dyed red for taxation purposes). Regular sulphur diesel fuels (§.05-0.50 % sulphur) may be colourless to feel for taxation purposes.	Pour Point	Variable, 0°C to -50°C (32°F to -58°F)
Odour	Fetroleum 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	Q.85 kg/L @ 15°C (Water = 1).	Oil / Water Dist. Coefficient	Not available
Vapour Density	4.5 (Air = 1)	Ionicity (in water)	Not applicable.

DIESEL FUEL		The state of the s		Page Number: 3
apour Pressure	1.0 kPa @ 2	20°C (7.5 mmHg @ 68°F).	Dispersion Propertie	cs Not available
/olatility	1	acetate = 1), less than gasoline.	Solubility	Insoluble in cold water, soluble in non-pol- hydrocarbon solvents.
Section 10. Stabili	ty and Rea	ethrity		
Corrosivity	Nat availab	COLUMN TO THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TO THE PERSON NAMED IN COL		A.A. Indiana de Maria
Stability		ct is stable under normal handling e conditions.	Hazardous Polymerization	Will not occur under normal working conditions.
Incompatible Substances / Conditions to Avoid	Reactive w	ith oxidizing agents and acids.	Decomposition Products	May release COx, NOx, SOx, H2S, H2O, smoke a initiating vapours when heated to decomposition.
Section 11. Toxica	ological Inf	formation		
Routes of Entry	The state of the s	Skin contact, eye contact, inhalation	, and ingestion.	
Acute Lethality	1	Acute oral toxicity (LD50): 7500 mg	/kg (rat).	Name of the state
Chronic or Other To: Dermal Route:	dd Effects		o severe initiation. Rep	peated exposure would produce drying and cracking
Inhalation Route:				ymptoms of nausea, headaches, vomiting, dizzine usness and possibly death, Inhaiation can also cau
Oral Route:		Aspiration of liquid drops into the lu severe lung damage, or respiratory		entially fatal chemical pneumonitis (fluid in the lungs
Eye irritation/inflamm	ation:	Eye contact may cause mild irritation	n, but no permanent da	mage.
Immunotoxicity:		Not available		
Skin Sensitization:	İ	This product is not expected to be components.	a skin sensitizer, based	d on the available data and the known hazards of the
Respiratory Tract Ser	nsideation:	This product is not expected to be hazards of the components.	a respiratory trect se	nstitzer, based on the available data and the know
Mutagenics	a best- new	This product is not expected to be components.	e a mutagen, based o	on the available data and the known hazards of the
Reproductive Toxicity		This product is not expected to be a the components.	reproductive hazard, b	based on the available data and the known hazards
Teratogenicity/Embry	otolicity:	This product is not expected to be hazards of the components,	e a teratogen or an embryotoxin, based on the available data and the know	
Carcinogenicity (ACC		ACCIH Notice of Intended Changed	(2000): proposed A3:	animal carcinogen. [Diesel oil]
Carcinogenicity (IARC	>):	This product is not known to contain carcinogens by IARC.	n arty chemicals at rep	portable quantities that are listed as group 1, 2A or
Carcinogenicity (NTP);	NTP.	in any chemicals at re	eportable quantities that are listed as carcinogens
Carcinogenicity (IRIS		Not available		
Cardnogenicity (OSH	(A):	This product is not known to conta OSHA.	in any chemicals at re	aportable quantities that are listed as cardinogens t
Other Considerations		No additional remark.		
Section 12, Ecolo	gidal Inform	mation		
Environmental Fate	Not availal	Well-Table sales in the same	Persistance/ Bloaccumulation	Not available

Environmental N Fata	ot avallable	Persistance/ Bloaccumulation Potential	Not available	
BOD5 and COD	ot available	Products of Biodegradation	Not available	

DIESEL FUEL			Page Humber 4		
The same of the sa	sal Considerations				
Waste Disposal	Preferred waste management priorities are; (1 lighted waste disposal facility. Ensure that or ideal disposal regulations. Consult your local or property of the property of	disposal or reprocessing	(2) incineration with energy recovery; (3) disposal g is in compliance with government requirements an		
Saction 14 Teshs	post Information				
TDG Classification	Diesel Fuel	Special Provisions	Not applicable.		
TDG Classification	UN1202 3, III	for Transport	тогарисане.		
5 11 15 5					
Section of the Person of Street, Stree	latory Information				
Other Regulations	This product is acceptable for use under the p OEPA-DSL (Domestic Substances List).	rovisions of WHMIS-CP	PR. All components of this formulation are listed on t		
	It components of this formulation are listed on the US EPA-TSCA Inventory.				
			ing Commercial Chemical Substances (EINECS).		
	MSDS contains all of the information required		a of the Controlled Products Regulations (CPR) and t		
	Please contact Product Safety for more inform	ation.			
D\$D/DPD (Europe)	Not evaluated.	HC3 (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)	T EVALUATED FOR	DOT (U.S.A)			
(Pictograms)	NON EVALUE POUR LE	(Pictograms)			
HMIS (U.S.A.)	TRANSPORT EUROPÉEN. Peralth Hazard (2) NFPA (U	SA)	Rating U Insignificant		
,,,,,,	Fire Hazard (2)		Tre Hezard 1 Slight		
	Beactivity	Health 100	Reactivity 2 Moderate		
	Porsanal Protection (H)	V :	Specific hazard 3 High 4 Extreme		
	r (nformation Available upon request. * Marque de commerce de Petro-Canada - Trade	mark			
Glossary	- As-	IDIO Li	modes Series		
ADR - Agreement on Dange	nos of Governmental Industrial Hygienists nous poods by Road (Europa)	IRtS - Integrated Risk Info LD50/LC50 - Lethal Dose/			
ASTM - American Society for BODS - Biological Oxygen D			Sched Lethal Dose/Concentration can Emergency Response Guide Book (1995)		
CAN/CGA B149.2 Prop	ane lestallation Codo	NFPA - National Fire Prev	vention Association		
CAS - Chemical Abstract Se CEPA - Canadian Environm		NIOSH - National Institute NPRI - National Poliutant I	for Occupational Safety & Hosith		
CERCLA - Comprehensive	Environmental Response, Compensation and Liability Act	NSNR - New Substances	Notification Regulations (Canada)		
CFR - Code of Federal Reg	uletions formation and Peckaging Approved Supply List	NTP - National Toxicology Program OSNA - Occupational Safety & Health Administration PEL - Permissible Exposure Limit			
CODS - Chemical Oxygen E	Demand in 5 days				
CPR - Controlled Products DOT - Department of Trans		RCRA - Resource Conser	ryplion and Recovery Add dments and Reorganization Act		
DSCL - Dangerous Substan	nces Classification and Labeling (Europe)	SD - Single Dese	CONTRACTOR STATE OF S		
DSD/DPD - Dangerous Sub DSL - Domestic Substanco	stander or Dangerous Preparations Ofrectives (Europe)	STEL - Short Term Expos TDG - Transportation Den			
EEC/EU - European Econor	mic Community/European Union	TDLa/TCLo - Lowest Publ	lished Toxic Dose/Concentration		
	bry of Existing Commercial Chemical Substances ing erid Community Right to Know Art	TLm - Median Tolerance L	Limit nR Value-Time Weighted Average		
FDA - Food and Drug Admi	nistration	TSCA - Toxic Substances	s Control Act		
FIFRA - Féderal Insepticide HCS - Hazardous Commun	, Fundicide and Rodenlicide Act icotion System	USEPA - United States En USP - United States Phon	nylronnental Protection Agency		
HMIS - Hazardous Material IARC - International Agency	Information System		ardous Malerial Information System		
For Copy of MSDS			Prepared by Product Safety - TAR on 3/2/2001.		
Fuels & Solvents:	anhana: 407 705 4455, fav. 407 305 5554		Data entry by Product Safety - JDW.		
Ontario & Central Ca	ephone: 403-295-4158; fax; 403-296-6551 mada, telephone: 1-800-668-0220; fax; 1-800- anada, telephone: 514-640-8308; fax: 514-640				
	nformation: (905) 804-4752				
Tall Strictle Printers					

DIESEL FUEL

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.



Material Safety Data Sheet

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

Section 1. Ch	emical Product and Company Identification		
Product Name	GASOLINE, UNLEADED	Code	W102E
Synonym	Regular, Unleaded Gasoline (US Grade), Mld-Grade, Plus, Super, WinterGas, SummerGas, Supreme, SuperClean WinterGas, RegularClean, Premium, marked or dyed gasoline, Super Premium (94 RO)	Validated o	n 08/20/2001.
Manufacturer	PETRO-CANADA P.O.; Box 2844 Calgary, Alberta T2P:3E3	Emergency Canutec Transportation: 613-998-666 Poison Control Centre: Clocal telephone director	
Material Uses	Unleaded gasofine is used in spark ignition engines including motor vehicles, inboard and outboard boat engines, small engines such as chain saws and lawn movers, and recreational vehicles.		emergency number(s).

				Exposure Limits (ACGIH)		
	Name	CAS#	% (V/V)	TLV-TWA(# h)	STEL	CEILING
1) Gasoline	4	8006-61-9	85-100	300 ppm (890 mg/m*)	500 ppm (1480	Not established
2) Methyl tert-butly ether	i i	1634-04-4	0-15	40 ppm (144mg/m²)	mg/m²) Not established	Not established
Manufacturer Recommendation	Not applicable					

Section 3. Hazar	rds Identification.
Potential Health Effects	Possible cancer hazard. Inhalation of vapours can be irritating to respiratory tract and cause CNS depression with symptoms of nausea, headaches, vomiting, dizziness, fatigue, light-headedness, reduced coordination, unconciousness and possibly death. Skin and eye contact can cause irritation. Toxic if Ingested. For more information, refer to Section 11.

Section 4. First	vid Measures
Eye Contact	IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek medical attention.
Skin Contact	emove 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	PO NOT induce vomiting because of danger of aspirating liquid into lungs. Seek medical attention.
Note to Physician	Not available

Flammability	flammable liquid (NFPA).	Flammable Limits	Lower: 1.3%; Upper: 7.6% (NFPA).
Flash Points	Closed Cup: -50 to -38*C (-58 to -36*F), ASTM D56 Standard Test Method for Flash Point by Tag Closed Tester.	Auto-Ignition Temperature	257°C (495°F) (NFPA).
Fire Hazards in Presence of Various Substances	Extremely flammable in presence of open flames, sparks, and heat. Vapours are heavier than air and may travel considerable distance to sources of ignition and flash back. Rapid escape of vapour may generate static charge causing ignition.	Explosion Hazards in Presence of Various Substances	Do not cut, weld, heat, drill or pressurize empty container. Containers may explode in heat of fire. Vapours may form explosive mixtures with air.
Products of Combustion	Carbon oxides (CO, CO2), nitrogen oxides (NOx), p	olynuclear aromatic hy	vdrocarbons, phenois, smoke and imitating vapours

GASOLINE, UNLEADED	Page Number: 2
Fire Fighting Media and Instructions	NAERG98, GUIDE 128, flammable/combustible liquid (non-polar/water-immiscible). CAUTION: This product has a very low flash point, use of water spray when fighting fire may be inefficient. SMALL FIRE: Use DRY chemicals, CO2, water spray of foam. LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet. If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions. DO NOT extinguish a leaking gas flame unless leak can be stopped. 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 sefety device or any discolouration of tank due to fire. Cool containing vessels with water spray in order to prevent pressure build-up, autolgnition or explosion. Avoid flushing spilled material into sewers, streams or other bodies of water. Self-contained breathing apparatus (SCBA) will be required if approaching the fire from downwind, or to enter enclosed areas or buildings.

Section 6. Accidental Release Measures

Material Release or Spill NAERG96, GUIDE 128, flammable/combustible liquid (non-polar/water-Immiscible). Evacuate in a downwind direction for at least 300 meters (1000 feet). ELIMINATE ALL IGNITION SOURCES. Ventilate closed spaces before entering. By forced ventilation, maintain concentration of vapour below the range of explosive mixture. Avoid contact, fully-encapsulating, vapour-protective clothing should be wom for spills and leaks with no fire. Stop leak if without risk. Use vapour suppressing fearn or water spray to reduce vapours; it may reduce vapour, but it may not prevent ignition in closed spaces; isolate area in this vapour has dispersed. Contain spill. Absorb with inert absorbents such as dry clay, or diatomaceous earth, or recover using electrically grounded explosion-proof pumps. Avoid inhaling dust of diatomaceous earth for it may contain sillos (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 opntainers. Notify the appropriate authorities immediately.

Section 7. Ha	indling and Storage
Handling	Heep away from heet, spark and other sources of ignition. Empty container may contain flammable/explosive residues or vapours. 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 USE AS CLEANING FLUID OR SIPHON BY MOUTH. Wear proper protective equipment. Avoid inhalation and contact with skin or eyes. Practice good personal hygiene. Wash hands after handling and before eating. Launder work clothes frequently. Discard saturated leather goods.
Storage	Store in cool, dry, isolated, well-ventilated area, and away from direct sunlight, sources of ignition and incompatibles. Planmable materials should be stored in a separate safety storage cabinet or room. Ground all equipment containing material.

Section 8, Exposu	re 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.
	The selection of personal protective equipment varies, depending upon conditions of use. By a protection (i.e., safety glasses, safety goggles and/or face shield) should be determined based on conditions of use. If a doubt is used in an application where splashing may occur, the use of safety goggles and/or a face shield should be donsidered.
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 inhelation.
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 3. Physi	cal and Chemical Properties		
Physical State and Appearance	Clear liquid.	Viscosity	0.6 cSt.
Colour	Clear to slightly yellow, undyed liquid. May be dyed red for taxation purposes.	Pour Point	Not applicable.
Odour	Gasoline. MTBE has a terpene-like odour.	Softening Point	Not applicable,
Odour Threshold	Less than 1 ppm.	Dropping Point	Not applicable.
Boiling Point	25 to 220°C (77 to 428°F) Initial boiling point by ASTM D86 Standard Test Method.	Penetration	Not applicable.
Density	0.7 kg/L @ 15°C (59°F).	Oll / Water Dist. Coefficient	Not available
Vapour Density	0 4 (Air = 1) (NFPA).	Ionicity (in water)	Insoluble in water.
Vapour Pressure	107 kPa @ 37.8°C (100°F)	Dispersion Properties	Not available
Volatility	Volatile.	Solubility	Hydrocarbon components virtually insoluble is water. Soluble in alcohol, ether, chloroform, and benzene. Dissolves fals, oils and natural resins

Continues on Next Prope

GASOLINE, UNLEADED			Page Number: 3
Section 10. Stabili	ty and Reactivity		
Corrosivity	Non corrosive.		
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, acids.	Decomposition Products	May release COx, NOx, phenols, polynuclear aromatic hydrocarbons, smoke and irritating vapours when heated to decomposition.

Routes of Entry	Skin contact, eye contact, inhalation, and ingestion.
Acute Lethality	Gasoline: Acute oral toxicity (LD50): 13 600 mg/kg (rat). Acute dermal toxicity (LD50): >5000 mg/kg (rabbit). Acute inhalation toxicity (LC50): >300 000 mg/m²/4h (rat).
	MTBE: Acute oral toxicity (LD50): 29830 mg/kg (rat). Acute dermal toxicity (LD50): >6800 mg/kg (rabbit). Acute inhalation toxicity (LC50): 23 576 ppm/4h (rat).
Chronic or Other Toxio Dermal Route:	This product can cause skin irritation. Prolonged or repeated contact with skin may cause dermatitis.
Inhalation Route:	inhalation of vapours can be imitating to repiratory tract and cause CNS depression with symptoms of nausea headaches, vorniting, dizziness, fatigue, light-headedness, reduced coordination, unconclousness and possibly death.
Oral Route:	Swallowing or vomiting of the liquid may result in aspiration into the lungs. Can cause CNS depression, (Sec Inhalation Route for symptoms).
Eye Intation/Inflammation:	Can cause imitation to the eyes.
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 Track 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 considered to be a mutagen, based on the available data and the known hazards of the components.
Reproductive Toxicity:	This product is not considered to be a reproductive hazard, based on the available data and the known hazards of the components.
Teratogenicity/Embryotokicity:	This product is not considered to be a teratogen or an embryotoxin, based on the available data and the known hazards of the components.
Carcinogenicity (ACGIH):	ACGIH A3: animal carcinogen. [Gasoline, MTBE]
Carcinogenicity (IARC):	IARC Group 2B; possibly carcinogenic to humans. [Gasoline]
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	Unleaded gasoline caused kidney effects in male rats and liver effects in female mice.

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

Section 13. Dispose	Considerations
	Preferred waste management priorities are: (1) recycle or reprocess; (2) incineration with energy recovery; (3) disposal at Ilcensed waste disposal facility. Ensure that disposal or reprocessing is in compliance with government requirements and local disposal regulations. Consult your local or regional authorities.

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GASOLINE, UNLEADED			Page Number: 4
Section 14. Transp	port Information	s atom	
TDG Classification	Shipping Name: Gasoline; UN 1203; Class 3; Packing Group II;	Special Provisions for Transport	Not available

	latery information			HIO ORD AN		
Other Regulations	CEPA: This product is acceptable for the CEPA-DSL (Domestic Substitutentory. This product has been classified in MSDS contains all of the information.	stances List). EPA	: All componei	nts of this formulat	tion are listed	on the US EPA-TSCA
DSD/DPD (Europe)	Not evaluated.	нсѕ	(U.S.A.)	cancer. CLASS: Flam lower than 37 CLASS: Irrita		œ.
ADR (Europe) (Pictograms)	NOY EVALUATED FOR EDROPEAN TRANSPORY NON ÉVALUÉ POUR LE TRANSPORT FURDEFFN	P. C.	(U.S.A) ograms)			
HMIS (U.S.A.)	Resith Hazard 2"	NFPA (U.S.A.)		Fire Hazard	Rating	0 Insignificent
	Fire Mazard 4	Hea	m 🐙	Reactivity		1 Slight 2 Moderate
	Reactivity		100	Specific hazard		3 High
	Rersonal Protection			eperilic idzard		4 Extreme

Section 16. Other Information	
References Available upon request. * Magique de commerce de Petro-Canada - Trade	mark
Glossary ACGiH - American Conference of Governmental Industrial Hygleniste ADR - Agreement on Dangerous poods by Road (Europe) ASTM - American Society for Teshing and Motoriols (9005 - Biological Oxygen Demaid in 5 days CAN/CGA B149.2 Propagate Installation Code CAS - Chemical Abstract Servicas CEPA - Canadian Environmental Protection Act CERCLA - Comprehensive Environmental Response, Compensation and Liability Act CFR - Code of Federal Regulations CHIP - Chemicals Hazard information and Fackaging Approved Supply List COD5 - Chemical Oxygen Demaid in 5 days CFR - Controlled Products Regulations DOT - Department of Transport DSCL - Dangerous Substances of isselfication and Labeling (Europe) DSD/DPD - Dengerous Substances of isselfication and Labeling (Europe) DSDL - Domestic Substance List EEC/EU - European Economic Cemmunity/European Union EINECS - European Economic Cemmunity (Right to Know Act FDA - Food and Drug Administration FIFRA - Federal Insecticide, Fungicide and Rodenticide Act HCS - Hazardous Material Information System LARC - International Agency for Research on Cancer	IRIS - Integrated Risk Information System LD50/LC50 - Lothal Dosa/Concentration kill 50% LDLo/LCL0 - Lowest Published Lethal Dose/Concentration NASRG'96 - North Amorican Emergoncy Response Guide Book (1996) NFPA - National Fire Prevention Association NIOSH - National Institute for Occupational Safety & Health NFRI - National Follutant Release Inventory NSNR - New Substances Notification Regulations (Canada) NTP - National Toxicology Program OSHA - Occupational Safety & Health Administration PEL - Permissible Exposure Limit RCRA - Resource Conservation and Recovery Act SARA - Superfund Amendments and Reorganization Act SO - 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 Environmental Information System
For Copy of MSDS	Prepared by Product Safety - TAR on 06/20/2001.
Fuels & Solvents:	Data entry by Product Safety - TAR.

Western Canada, teleph 19: 403-296-4158; fax: 403-296-6551
Ontario & Central Canada, telephone: 1-800-668-0220; fax: 1-800-837-1228
Quebec & Eastern Canada, telephone: 514-640-8308; fax: 514-640-8385

For Product Safety Information: (905) 804-4752

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.



Material Safety Data Sheet

WHMIS (Pictograms)	WHMIS (Classification)	Protective Clothing	TDG (pictograms)
• 🗇 -	B-3, D-2B (D-2A)* (See Section 15)		4

Product Name	JET A/A-1 AVIATION TURBINE FUEL	Code	W213 SAP: 149
Synonym	Jet A-1; Jet A-1-DI; Aviation Turbine Kerosene (ATK); JP-8; NATO F-34; Jet F-34; Turbine Fuel, Aviation, Kerosene Type (CAN/CGSB-3.23)	Validated o	n 8/17/2001.
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 Centre: Consult
Material Uses Use as aviation turbine fuel. May contain a fuel system icing inhibitor afctic, Jet A-1 may also be used as diesel fuel and heating oil.			local telephone directory for emergency number(s).

	1			Exp	socure Limits (ACGIH)	
	Name	CAS#	% (VM)	TLV-TWA(8 h)	STEL	CEILING
*Aromatic content is 25 2) Fuel System Iding In Diethylene Glycol Mon 3) Anti-static, entioxida	rt and metal deactivator additives,	8008-20-6 111-77-3 Not applicable	99.9 ≤0.15 <0.1	Not established Not established Not applicable	Not established Not established Not applicable	Not established
Manufacturer Recommendation	Not applicable					
Other Exposure	Consult local, state, provincial or t	erritory authoritie	as for accept	able exposure limits.		

Section 3. Hazard	c Identification.
Potential Health Effects	Eye contact can cause mild irritation. Skin contact can cause moderate to severe irritation. Inhalation of vapours can cause irritation of the respiratory tract and CNS depression with symptoms of nausea, headaches, vomiting, dizziness, fatigue, light-headedness, reduced coordination, unconclouaness and possibly death. Aspiration 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 A	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

Flammability	Class II - combustible liquid (NFPA).	Flammable Limits	LOWER: 0.7% UPPER: 5%
Flash Points	CLOSED CUP: >38°C (100°F) Teg (A\$TM D55)	Auto-Ignition Temperature	210°C (410°F)
Fire Hazards in Presence of Various Substances	1	Explosion Hazards in Presence of Various Substances	Do not cut, weld, heat, drill or pressurize ampty container. Containers may explode in heet of fire.

MATONABEE PET.

JET AIA-1 AVIATION TURE	HNE FUEL		Page Number, 2
Products of Combustion	Carbon oxides (CO, CO2), nitrogen oxides (Nincomplete combustion.	Ox), sulphur oxides (S	Ox), amoke and irritating vapours as products of
Fire Fighting Media and	NAERG96, GUIDE 128, Flammable liquids (Nor CAUTION: This product has a very low flash pol	n-polar/Water-immiscible nt: Use of water spray w). hen fighting fire may be inefficient.
structions	If tank, rail cer or tank truck is involved in a fire evacuation for 800 meters (1/2 mile) in all direct		ters (1/2 mile) in all directions; also consider initia
	do it without risk.	n. Do not use straight o	streams. Move containers from fire area if you can
	Firea Involving Tanks or Car/Trailer Loads: Fig nozzles.	ht fire from maximum d	stance or use unmanned hose holders or monitor
	from venting devices or any discolouration of unmanned hose holders or monitor nozzles; it	tank. ALWAYS stay aw f this is impossible with	but. Withdraw immediately in case of rising sound ray from the ends of tanks. For massiva fire, use adraw from area and let fire burn. Wear positive ghters' protective clothing will only provide limited
Section 6. Accide	ntal Release Measures		
Material Release or Spill	dry clay, or diatomaceous earth. Avoid inhallin size, making this a potential respiratory hazard, absorbent in a suitable combustion chamber	ontact. Stop leak if with g dust of diatomaceous Place used absorbent . DO NOT FLUSH TO	ie). out risk. Contain spill. Absorb with inert absorbents, searth for it may contain sillca in very fine particle in closed metal containers for later disposal or burn SEWERS, STREAMS OR OTHER BODIES OF rements of spilled material and empty containers.
Section 7. Handlin			
Handling	containers without commercial cleaning or reco avoid accumulation of static charge. DO NOT wear suitable respiratory equipment. If ingest	nditioning, Ground/bon ingest. Do not breathe ted, seek medical advice	containers pose a fire risk. DO NOT reuse empty d line and equipment during pumping or transfer to gas/vapor/spray. In case of insufficient ventilation as immediately, Avoid contact with skin and eyes a eating. Launder work clothes frequently. Discontains
Storage		isolated, wall-ventilated	d area, and away from incompatibles. Ground al
Section 8. Expose	re ControlsiPersonal Protection		
	For normal application, special ventilation is not	the exposure limit. Ma	erations generate vapours or mist, use ventilation to ke-up air should always be supplied to balance all
	The selection of personal protective equipment protection (i.e., safety glasses, safety gogg	ipment varies, depend les and/or face shield) s	
Body	Wear appropriate clothing to prevent skin conta	ct. As a minimum long	sleeves and trousers should be worn.
Réspiratory	Where concentrations in air may exceed the or area) and where engineering, work practices or respirators may be necessary to prevent overey	or other means of expo-	its given in Section 2 (and those applicable to you sure reduction are not adequate, NIOSH approved
	insulated.		of product ensure gloves are heat resistant and
Feet	Wear appropriate footwear to prevent product f	rom coming in contact w	rith feet and skin.
Section 9. Physic	al and Chemical Properties		
Physical State and Appearance	Clear liquid.	Viscosity	1.0-1.9 cSt @ 40°C (104°F)
Colour	Colourless.	Pour Point	<-51°C (-60°F)
Odour	Kerosene-like.	Softening Point	Not applicable.
Odour Threshold	Not available	Dropping Point	Not applicable.
		-	The state of the s

Penetration
Oil / Water Dist.
Coefficient

lonicity (in water)

Dispersion Properties Not available

Available in French

Not applicable.

Not available

Not available

150 to 300°C (302 to 572°F)

4.5 (Air = 1)

0.8 to 0.82 kg/L @ 15°C (59°F).

0.70 kPa @ 20°C (5.25 mmHg @ 68°F).

Bolling Point

Vapour Density

Vapour Pressure

Continued on Next Page

Density

JET A/A-1 AVIATION TURE				Page Numbor: 3	
olatility	Lower than gasoline.		Solubility	Insoluble in water. Partially miscible in som alcohols. Miscible with other petroleur solvents,	
Section 10. Stabili	ty and Po	activity			
Corrosivity	Not availal				
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.		Decomposition Products	May release COx, NOx, SOx, smoke and irritating vapours when heeted to decomposition.	
Section 11. Toxic	ological in	formation.			
Routes of Entry		Skin contact, eye contact, inhalation	, and ingestion.		
Acute Lethality	Acute oral toxicity (LD50): >20000 mg/kg (rat). Acute dermal toxicity (LD50): >5000 mg/kg (rabbit). Acute inhalation toxicity (LC50): >5000 mg/m³/4h (rat). Diethylene Glycol Monomethyl Ether Acute oral toxicity (LD50): 4140-5180 mg/kg (rat). Acute dermal toxicity (LD50): >2000 mg/kg (rabbit). Acute inhalation toxicity (LD50): >50000 mg/m²/4h (rat).				
Chronic or Other Tox	ic Effects				
Dermal Route:		Skin contact can cause moderate to	severe irritation.		
Inhalation Route:				piratory tract and CNS depression with symptoms eadedness, reduced coordination, unconclousness a	
Oral Route:	Aspiration into the lungs may produce potentially fatal chemical pneumonitis (fluid in the lungs), severe damage, or respiratory failure.				
Eye Irritation/Inflamm	ation:	Eye contact can cause mild Irritatio	n.		
Immunotoxicity:		Not svallable			
Skin Sensitization;		This product is not expected to be components.	s skin sensitizer, bas	ed on the available data and the known hazards of t	
Respiratory Tract Ser	sitization:	This product is not expected to be a respiratory tract sensitizer, based on the available data and the known hazards of the components.			
Mutagenio;		components.		on the available data and the known hezerds of t	
Reproductive Toxicity	of the components.				
Teratogenicity/Embry	A CONTRACTOR OF THE PARTY OF TH	Fetotoxicity, embryotoxicity and/or teratogenicity have been observed in rats or rabbits following oral or dem administration, in the absence of maternal toxicity. [Diethylene Glycol Monomethyl Ether]			
Carcinogenicity (ACG	H):	This product is not known to contain any chemicals at reportable quantities that are listed as A1, A2 or carcinogens by ACGIH.			
Carcinogenicity (IARC):	IARC Group 3; Not classiflable as a human carcinogen.			
Cardinogenicity (NTP)	-	This product is not known to contain any chemicals at reportable quantities that are listed as carcinogens NTP.			
Cardinogenicity (IRIS)		This product is not known to contain any chemicals at reportable quantities that are listed as carcinogens IRIS.			
Carcinogenicity (OSH	A):	This product is not known to contain any chemicals at reportable quantities that are listed as ceroinogens OSHA.			
Other Considerations		No additional remark.			
Section 12 Ecolo	ninal Inter	rmetion			
Environmental			Persistance/	Not available	
Fate	Not available		Bioaccumulation Potential		
BODs and COD	Not avaitable		Products of Blodegradation	Not available	
Additional Remarks	No oddill	onal remark.			

Continued on New Page

	SINE FUEL	AMERICAN STREET, STREE			
Section 13, Dispo	sal Considerations				
Vaste Disposal	Preferred waste management priorities are: (1) recycle or reprocess; (2) incineration with energy recovery; (3) disposal licensed waste disposal facility. Ensure that disposal or reprocessing is in compliance with government requirements a local disposal regulations. Consult your local or regional authorities.				
Section 14. Trans	port Information				
TDG Classification	Currently: Fuel, aviation, turbine engine, 3, UN1863, PGIII As of August 15, 2002: FUEL, AVIATION, TURBINE ENGINE, 3, UN1863, PGIII	Special Provisions Not applicable. for Transport			
Section 15 Page	alory Information				
Other Regulations	This product is acceptable for use under the provisions of WHMIS-CPR, All components of this formulation are ligited 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) at the MSDS contains all of the information required by the CPR.				
	Please contact Product Safety for more information of Jet A/A-1 is B3, In The WHMIS classification of Jet A/A-1-DI, J. Monomethyl Ether), is B3, D2A, D2B.				
DSD/DPD (Europe)	Not evaluated.	HC\$ (U.S.A.) CLASS: Irritating substance. CLASS: Target organ effects. CLASS: Combustible liquid having a flash poin between 37.8°C (100°F) and 93.3°C (200°F).			
ADR (Europe) (Pictograms)	NOT EVALUATED FOR EUROPEAN TRANSPORT NON ÉVALUÉ POUR LE TRANSPORT EUROPEEN.	DOT (U.S.A) (Pictograms)			
HMIS (U.S.A.)	Health Hazard (2) Fire Hazard (2) Reactivity (0) Personal Protection (H)	S.A.) Fire Hazard Rating 0 Insignificent 1 Slight 2 Moderate Specific hazard 3 High 4 Extreme			
4-					
Section 16. Othe	The state of the s				
References	Available upon request. ' Marque de commerce de Petro-Canada - Tradei	mark			
ADR - Agréement on Dans, ASTM - American Society BOOS - Biological Oxygen CAN/CGA B149.2 Pro CAS - Chemical Abstract S CEPA - Canadian Environi CERCLA - Comprehensiva Act CODS - Chemicals Hazard CODS - Chemicals Hazard CODS - Chemical Oxygen CPR - Controlled Products DOT - Department of Trans DSCL - Dangerous Substance SCL - Dangerous Substance SCL - Dangerous Substance SCL - European Ecome EINECS - European Ecome EINECS - European Invention EINECS - European Invention EPCRA - Federal Invaccició HCS - Hazardous Communications de la communicació de la communi	plane Installation Codo ervices maintal Protection Act ervices maintal Protection Act experimental Response, Componsation and Liability stations information and Packaging Approved Supply List Germand in 5 days Regulations seort rices Classification and Labeling (Europe) Substances or Dangerous Preparations Directives List onic Community/European Union tory or Existing Commercial Chemical Substances inglishmation (f) Funcicide and Rodenticide Act installan System Information System	IRIS - Integrated Riek Information System LD50/LC50 - Lethel Dose/Concentration kit 50% LDLo/LCLo - Lowest Published Lethel Dose/Concentration NAERG98 - North American Emergency Response Guide Book (1995) NFPA - National Fire Prevention Association NIOSH - National Institute for Ocrupational Safety & Health NPRI - National Poliutant 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 R			
	for Research on Concor				

400 6

JET A/A-1 AVIATION TURBINE FUEL Page Number: 5 Western Canada, telophone: 403-296-4158; fax: 403-296-6551 Ontario & Central Carlada, telephone: 1-800-668-0220; fax: 1-800-837-1228 Quebec & Eastern Canada, telephone: 514-640-8308; fax: 514-640-8385 Data entry by Product Safety - JDW. For Product Safety Information: (905) 804-4752

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 sulfability 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.



Poly-Drill Drilling Systems

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

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: 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