




WHMIS (Pictograms)	WHMIS (Classification)	Protective Clothing (Pictograms)	TDG (Pictograms)
	A: Compressed Gas B: Flammable and Combustible Material		 UN1075

Section 1. Hazardous Ingredients				
Name	CAS #	% (W/W)	TLV-TWA (8 Hr)	Ceiling
Natural Gas Liquids	68919-39-1	100	Not available	Not available
LD50 (species and route)	Testing not conducted.			
LC50 (species and route)	Testing not conducted.			

Section 2. Preparation Information	
Created By:	Intergroup Companies (403) 253-9138
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Section 3. Product Information			
Product Name	NATURAL GAS LIQUIDS (N.G.L.)	In case of emergency	PrimeWest Energy Inc. 24 Hr. Emergency #: 1-888-234-6866 CANUTEC: 1-613-996-6666 Poison Control Centre: Consult local telephone directory for emergency number(s)
Synonym	Liquid Petroleum Gas, NGL, BC Hydro Gas		
Manufacturer	PrimeWest Energy Inc. 4700, 150 – 6 Avenue S.W. Calgary, Alberta T2P 3Y7		
Product Use			

Section 4. Physical Data			
Physical State	Liquid	Viscosity	Not available
Colour	Colourless	Specific Gravity	0.35 to 0.58
Odour	Natural Gas odour	pH	Not applicable
Odour Threshold	Not available	Oil/Water Dist. Coefficient	<1%
Boiling Point	-72.2°C to 32°C (-98°F to 90°F)	Freezing Point	-180° C (-292° F)
Vapour Density	0.9 to 2.5	Vapour Pressure	> 13 kPa @ 24° C

Section 5. Fire or Explosion Hazard			
Flammability	Extremely Flammable	Auto-Ignition Temperature	Not available
Upper Flammable Limit	12.5%	Lower Flammability Limit	1.5%
Explosion Data - sensitivity to mechanical impact	None known.	Explosion Data - sensitivity to static discharge	Vapours may ignite at distant ignition sources and flash back.

Section 5. Fire or Explosion Hazard (continued)	
Flash Point and method of determination	-18°C (-0.4°F)
Products of Combustion	Oxides of Carbon.
Fire Fighting Media and Instructions	Use water spray to cool fire exposed surfaces and to protect personnel. Shut off fuel to fire if possible to do so without hazard. If a leak or spill has not ignited use water spray to disperse the vapours. Do not extinguish flames at leak because possibility of uncontrolled explosive re-ignition exists. Cut off fuel and/or allow fire to burn out. Extinguish small residual fires with dry chemical powder or water spray. Try to cover liquid spills with foam. Remove compressed gas cylinders from fire area if possible. Respiratory and eye protection required for fire fighting personnel. A self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of an SCBA may not be required.

Section 6. Reactivity Data			
Circumstances of Instability	Stable at normal temperature and pressure.	Decomposition Products	Oxides of Carbon.
Conditions of Reactivity	None known		
Incompatible Substances/Conditions to Avoid	Heat; ignition sources; and strong oxidizing agents.		

Section 7. Toxicological Properties	
Routes of Entry	Skin, inhalation, oral, and eye contact.
Effects of Acute Exposure	
Dermal	Liquid can cause burns similar to frostbite. Direct contact with skin causes pain and redness.
Inhalation	Inhalation of low concentrations causes a runny nose with a loss of sense of smell, laboured breathing and shortness of breath.
Oral	Ingestion of liquid can cause burns similar to frostbite. Harmful or fatal if liquid is aspirated into lungs.
Eye Irritation/Inflammation	Extremely cold material; can cause burns similar to frostbite. Contact with eyes causes painful conjunctivitis, sensitivity to light, tearing and clouding of vision.
Effects of Chronic Exposure	
Dermal	Causes skin irritation on prolonged or repeated contact. Can defat the skin and lead to irritation and/or dermatitis.
Inhalation	Inhalation of vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness, and nausea and may lead to unconsciousness or death.
Oral	Not available.
Eye Irritation/Inflammation	Prolonged breathing (greater than one hour) of concentrations of H ₂ S around 50 ppm can produce eye irritation.

Section 7. Toxicological Properties (Continued)	
Irritancy of Product	
Dermal	Irritant.
Inhalation	Prolonged breathing (greater than one hour) of concentrations of H ₂ S around 50 ppm can produce respiratory tract irritation.
Oral	Causes gastrointestinal irritation and diarrhea. Harmful or fatal if liquid is aspirated into lungs.
Eye Irritation/Inflammation	Prolonged breathing (greater than one hour) of concentrations of H ₂ S around 50 ppm can produce eye irritation.
Sensitization of Product	
Dermal	Testing not conducted.
Inhalation	Testing not conducted.
Oral	Testing not conducted.
Eye Irritation/Inflammation	Testing not conducted.
Exposure Limits	
Immunotoxicity	Not available.
Skin Sensitization	Not available.
Respiratory Tract Sensitization	Not available.
Mutagenic	Not available.
Reproductive Toxicity	Not available.
Teratogenicity/Embryotoxicity	Not available.
Carcinogenicity (ACGIH)	Not available.

Section 8. Preventative Measures	
Engineering Controls	The use of mechanical dilution ventilation is recommended to maintain airborne concentrations below the recommended occupational exposure limits, whenever this material is used in a confined space, is heated above normal temperatures (up to 38° C) or is agitated. Use explosion-proof ventilation equipment.
Personal Protection	- This selection of personal protective equipment varies, depending upon conditions of use.
Eyes	Wear safety glasses with side shields.
Body	Wear long sleeved shirts.
Respiratory	Where concentrations in air may exceed the occupational exposure limits given in Section 1 and where engineering, work practices or other means of exposure reduction are not adequate, approved respirators may be necessary to prevent overexposure by inhalation.
Hands	Wear insulating gloves.
Feet	As needed to prevent contact with liquid; wear protective footwear.
Accidental Release Measures	
Material Release or Spill	Avoid heat, flames, sparks, and other sources of ignition. Do not touch spilled material. Stop leak if possible without personal risk. Reduce vapours with water spray. Keep unnecessary people away, isolate hazard area and deny entry. Remove sources of ignition. Ventilate closed spaces before entering.

Disposal Considerations		
Waste Disposal	Dispose in accordance with all applicable regulations. The container for this product can present explosion or fire hazards, even when emptied! To avoid risk of injury, do not cut, puncture or weld on or near this container. Since the emptied containers retain product residue, follow product insert warnings even after container is emptied.	
Handling and Storage		
Handling	Keep away from all ignition sources. Keep container tightly closed. Use with adequate ventilation. Ground and bond containers when transferring materials. Ground and bond all lines and equipment. Do not cut, puncture, or weld on or near this container. Do not breathe vapours. Vapours containing Hydrogen Sulphide may accumulate during storage or transport. SPECIAL PRECAUTIONS: Avoid strong oxidizers.	
Storage	Outside storage is recommended. Store in a cool, dry, well-ventilated area. Do not store in areas containing flammable or combustible products. Store away from heat, ignition sources, and open flame in accordance with applicable regulations. Do not store in unlabelled containers.	
Transport Information		
TDG Classification	2.1: Flammable Gases	Special Provisions for Transport See Transportation of Dangerous Goods Regulations for details.

Section 9. First Aid Measures	
Eye Contact	Contact with liquid: Immediately flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.
Skin Contact	Contact with liquid: Immediately flush with plenty of tepid water (41°C-46°C, 105°F-115°F). DO NOT USE HOT WATER. Get immediate medical attention.
Inhalation	If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.
Ingestion	If swallowed, do NOT induce vomiting. Get immediate medical attention.
Note to Physician	None available.
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