1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	Condensate, Sweet
SYNONYMS:	Sweet Condensate
CHEMICAL NAME:	Petroleum
CHEMICAL FAMILY:	Petroleum Hydrocarbon
PRODUCT USE:	Refinery feedstock
SUPPLIER:	Plains Midstream Canada Suite 1400, 607 – 8th Avenue S.W. Calgary, AB, T2P 0A7
Emergency Telephone:	1-866-875-2554 Canutec (613) 996-6666 or *666 Cellular

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
DANGER!!

EXTREMELY FLAMMABLE- WILL DISPLACE AIR FROM ENCLOSED SPACES - ASPHYXIANT HAZARD. MAY EVOLVE HYDROCARBONS - EFFECTS CENTRAL NERVOUS SYSTEM - HARMFUL OR FATAL IF SWALLOWED - ASPIRATION HAZARD.

High fire hazard. Keep away from heat, spark, open flame, and other ignition sources.

HYDROGEN SULPHIDE (toxic gas) may be released. High concentration may cause immediate unconsciousness - death may result unless victim is promptly and successfully resuscitated.

Avoid prolonged breathing of vapors or mists. Inhalation may cause irritation, anesthetic effects (dizziness, nausea, headache, intoxication), and respiratory system effects. Contains benzene, which can cause blood disease, including leukemia. Benzene, Hexane and Toluene are readily absorbed through intact skin.

POTENTIAL HEALTH EFFECTS

ROUTE(S) OF ENTRY

Eyes:	Yes	Skin:	Yes	Inhalation:	Yes	Ingestion:	Yes

EYES

MODERATE TO SEVERE IRRITANT. Liquids and vapors may cause irritation to the eyes, conjunctiva, and mucous membranes, causing redness and tearing. Splashing of liquid into the eyes will cause smarting and pain.

SKIN

SLIGHT TO MODERATE IRRITANT. Contact may cause irritation to the skin and mucous membranes upon prolonged and/or repeated skin contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are exposed. Prolonged or repeated contact to petroleum oil with skin may cause defatting of the skin leading to redness, itching, inflammation, cracking, dermatitis (rash), and possible secondary infection. High-pressure skin injections are serious medical emergencies. The appearance of injury may be delayed for a few hours, but may cause tissue to become swollen, discolored and extremely painful.

INGESTION

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluids in the lungs), severe lung damage, respiratory failure and even death. Ingestion may cause gastrointestinal disturbances, such as irritation, nausea, vomiting and diarrhea, and central nervous system effects. Acute symptoms of ingestion are most common, including excitation, restlessness, euphoria, nausea, headache, dizziness, drowsiness, blurred vision, reduced

coordination, and fatigue. In more severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

INHALATION
Vapors may cause nose and throat irritation, anesthetic effects and central nervous system (CNS) depression. Inhalation may result in nausea, dizziness, drowsiness, headaches, and other symptoms similar to those listed under "Ingestion". Certain ingredients may produce systemic effects to the blood, liver, kidneys, central nervous system and cardiovascular system. Inhalation of high concentrations can cause rapid CNS depression, cardiac arrhythmia, unconsciousness, coma, and possibly death resulting from respiratory failure.

WARNING: Although this product is not known to contain hydrogen sulphide it is a collection of multiple sources and may contain hydrogen sulphide. Irritating and toxic hydrogen sulphide gas may be released. At high concentrations (500 - 1000 ppm), hydrogen sulphide acts as a systemic poison, causing unconsciousness and death. In lower concentrations (50 - 500 ppm), hydrogen sulphide acts as a respiratory irritant, and may cause fluid in the lungs or bronchial pneumonia. The rotten egg odor of hydrogen sulphide is not a reliable indicator for warning of exposure, since olfactory fatigue (loss of smell) readily occurs, especially at concentrations above 50 ppm.

WARNING: The burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

CHRONIC EFFECTS/CARCINOGENICITY
Contains carcinogens according to IARC, NTP, ACGIH and OSHA. Contains benzene; a regulated human carcinogen. Benzene is recognized as having the potential to cause anemia and other blood diseases, including leukemia, after repeated and prolonged exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
Irritation from skin exposure may aggravate existing open wounds, skin disorders, and dermatitis (rash) conditions. Chronic respiratory disease, liver or kidney dysfunction, or pre-existing central nervous system disorders may be aggravated by exposure.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	Concentration % (wt/wt)	CAS Number
Condensate	100	68919-39-1
Benzene	0.1 to1.5	71-43-2
Toluene	1 to 5	108-88-3
Ethylbenzene	1 to 5	100-41-4
Xylene, Mixed isomers	1 to 5	1330-20-7
Hydrogen Sulphide	<0.5	7783-06-4
Iso-Pentane	3 to 7	78-78-4
n-Pentane	5 to 10	109-66-0
n-Hexane	7 to 13	110-54-3
Heptane	10 to 30	142-82-5
Octane	7 to 13	111-65-9
Nonane	7 to 13	111-84-2
Decane	5 to 10	124-18-5
Undecane	3 to 7	1120-21-4
Dodecane	1 to 5	112-40-3
Tridecane	1 to 5	629-50-5
Tetradecane	1 to 5	629-59-4
Pentadecane	1 to 5	629-62-9
Methylcyclopentane	1 to 5	96-37-7
Cyclohexane	1 to 5	110-82-7
Methylcyclohexane	3 to 7	108-87-2

Condensate is a liquid hydrocarbon product associated with Natural Gas and is used as refinery feedstock for the crude or condensate units. Sweet condensate contains <0.5% dissolved hydrogen sulphide. This product is a commingled stream from multiple petroleum facilities and is a complex mixture consistent with the definition within WHMIS regulation CPR section 2. The listed components are provided as guidance based on the available knowledge of the commingled stream.

4. FIRST AID MEASURES

EYES
In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

SKIN
Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or waterless hand cleanser. Obtain medical attention if irritation or redness develops. High-pressure injections are serious medical emergencies - seek immediate medical attention.

INGESTION
DO NOT INDUCE VOMITING BECAUSE OF DANGER OF BREATHING LIQUID INTO LUNGS. Seek immediate medical attention. Rinse mouth with water. Administer 1 to 2 glasses of water or milk to drink. Never administer liquids to an unconscious person. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Seek medical attention. Monitor for breathing difficulty.

INHALATION
Remove person to fresh air. If person is not breathing, ensure an open airway and administer CPR. If necessary, provide additional air or oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES
EXTREMELY FLAMMABLE.

FIRE AND EXPLOSION HAZARDS
This is a commingled petroleum stream from various locations and producers the actual flammable characteristics are difficult to predict but this product should be considered as an extremely flammable liquid. Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard. Liquids will float on water. Liquid may accumulate static charge.

EXTINGUISHING MEDIA
SMALL FIRES: Any extinguisher suitable for Class B fires - dry chemical, CO_2, water spray, fire foam, or Halon.

LARGE FIRES: Water spray, fog or fire foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

FIRE FIGHTING INSTRUCTIONS
Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment.

Fire fighting activities that may result in potential exposure to high heat, smoke or toxic byproducts of combustion should require approved self-contained breathing apparatus (SCBA) with full-facepiece and full protective firefighting clothing.

Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. If leak or spill has not ignited, ventilate area and determine if water spray would assist in dispersing gas or vapor to protect personnel attempting to stop leak. Water may be useful in flushing spills away from ignition sources; however, do NOT flush petroleum products down public sewers or other drainage systems.

For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam. Refer to NAERG Guide 128.

6. ACCIDENTAL RELEASE MEASURES

ACTIVATE YOUR FACILITY'S SITE SPECIFIC EMERGENCY RESPONSE PLAN if available.

Evacuate nonessential personnel and remove or secure all ignition sources for 300m (1000ft). Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Hydrogen sulphide may be evolved during a release, ensure response personnel are adequately protected - see Section 8 for personal protection.

Carefully contain and stop the source of the spill, if safe to do so. Do not flush down sewer or drainage systems. Protect bodies of water by diking, if possible. The use of fire fighting foam may be useful in certain situations to reduce vapors.

SMALL SPILLS: Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Cleanup crews must be properly trained and must utilize proper protective equipment.

LARGE SPILLS: Dike far ahead of the spill. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas /equipment that require protection. Consideration should be given to environmental clean-up and waste material generation when determining if the use of large volumes of water is appropriate for non-fire emergency situations. Cleanup crews must be properly trained and must utilize proper protective equipment. Notify regulatory authorities. Refer to NAERG Guide 128.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS
Handle as a flammable liquid. Keep away from heat, sparks, and open flame. No smoking or open flame in storage, use of handling areas. Keep containers closed and clearly labeled. Ground all drums and transfer vessels when handling. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition. Use only with adequate ventilation. Avoid breathing vapors. Wash thoroughly after handling. Electrical equipment should be approved for classified area. DO NOT siphon by mouth.

STORAGE PRECAUTIONS
Store in a well ventilated area. This storage area should comply with NFPA 30. Avoid storage near incompatible materials.

WORK/HYGIENIC PRACTICES

Emergency eye wash capability should be available in the vicinity of any potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not eat, drink or smoke in areas of use or storage. Do not use gasoline or solvents (naphtha, kerosene, etc) for washing this product from exposed skin areas. Waterless hand cleansers are effective.

Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS

Benzene	71-43-2	TWA= 0.5 ppm (skin) TLV-STEL= 2.5 ppm
Toluene	108-88-3	TWA= 50 ppm (skin)
Ethylbenzene	100-41-4	TWA= 100 ppm
Xylene, mixed isomers	1330-207	TWA= 100 ppm
Hydrogen Sulphide	7783-06-4	TWA= 5 ppm STEL= 10 ppm
Iso-Pentane	78-78-4	ACGIH TLV-TWA= 600 ppm
n-Pentane	109-66-0	ACGIH TLV-TWA= 600 ppm
n-Hexane	110-54-3	ACGIH TLV-TWA= 50 ppm (skin)
Heptane	142-82-5	ACGIH TLV-TWA= 400 ppm
Octane	111-65-9	ACGIH TLV-TWA= 300 ppm
Nonane	111-84-2	ACGIH TLV-TWA= 200 ppm
Cyclohexane	110-82-7	ACGIH TLV-TWA= 300 ppm
Methylcyclohexane	108-87-2	ACGIH TLV-TWA= 400 ppm

ENGINEERING CONTROLS

Use adequate ventilation to keep vapor and mist concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces. Use explosion-proof equipment and lighting in classified/controlled areas.

EYE/FACE PROTECTION

Faceshield or chemical splash goggles are recommended where there is a possibility of splashing or spraying.

SKIN PROTECTION

Avoid repeated or prolonged skin contact. Gloves constructed of nitrile, neoprene, or PVC are recommended. Chemical protective clothing such as of poly-coated or equivalent recommended based on degree of exposure.

Note: The resistance of specific materials may vary from product to product as well as degree of exposure. Consult manufacturer specifications for further information.

RESPIRATORY PROTECTION

For hydrogen sulphide hazard (above H_2S permissible exposure limits): SCBA or a supplied air respirator must be used.

If exposure assessment indicates NO reduced oxygen content or hydrogen sulphide hazard (below H_2S exposure limit): NIOSH/MSHA - approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited and should not be considered especially when odor cannot be used to determine respirator effectiveness. Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, or any other circumstance where an air-purifying respirator may not provide adequate protection.

Refer to CSA Standard "Selection, Use and Care of Respirators" (Z94.4-02) and NIOSH Respirator Decision Logic for additional guidance on respiratory protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

BASIC PHYSICAL PROPERTIES

APPEARANCE

Generally a thin yellow to brown liquid.

ODOR

A hydrocarbon odor. If present Hydrogen Sulphide (H_2S) has a rotten egg odor, but should not be used as warning property of toxic levels because H_2S can overwhelm and deaden the sense of smell. The smell of H_2S should not be used as an indicator of a hazardous condition - a calibrated H_2S meter can be used to determine the concentration of H_2S.

PHYSICAL STATE:	Liquid
FLASH POINT:	-20°C to 93.3 °C (Flash point are in the flammable range but are highly dependent on condensate. This is a commingled stream of condensates from various producers.
BOILING POINT:	-20 to 1100 °C
VAPOR PRESSURE:	variable
VAPOR DENSITY (Air = 1):	3 to 5
SPECIFIC GRAVITY:	0.7 to 0.85 (water - 1.0):
SOLUBILITY (H_2O):	Insoluble to slightly soluble
PARTITION COEFFICIENT:	2 to 6

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID (STABILITY)

Material is stable under normal conditions. Avoid high temperatures, open flames, sparks, welding, smoking and other ignitions sources.

INCOMPATIBLE MATERIALS

Keep away from strong oxidizers, ignition sources and heat.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke). Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.

HAZARDOUS POLYMERIZATION: Will Not Occur.

11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS

Potential short-term effects of exposure are: irritation eyes, skin, nose, mucous membrane, respiratory system.

Repeated or prolonged skin exposure to petroleum oils may cause various skin disorders, such as contact or eczematous dermatitis, folliculitis, oil acne, lipid granuloma, melanosis, and rarely precancerous warts on the

forearms, backs of hands or scrotum. Contains Benzene, Hexane and Toluene are readily absorbed through intact skin and have Skin Notations by ACGIH.

ACUTE ORAL EFFECTS

Ingredient	CAS No	LD50	LC50
Condensate	68919-39-1	Dermal Toxicity > 2000 mg/kg	Not available Not available
Toluene	108-88-3	Rat oral 5000 mg/kg Rat oral 3500 mg/kg	400 ppm/4hr
Ethyl benzene	100-41-4	Rabbit skin 17,800 mg/kg	Not available
Xylene, mixed isomers	1330-20-7	Mouse oral 1590 mg/kg	Rat inhalation: 6,350 ppm/4 hr
Benzene	71-43-2	Rat oral 3306 mg/kg	Rat ihl 10,000 ppm/7 hr Rat inhalation 380 mg/ cu m > 960
Hydrogen Sulphide	7783-06-4	Not applicable	min
Iso-Pentane	78-78-4	Not available	LC50 140000ppm/2 hrs mice
n-Pentane	109-66-0	Not available	LD50 Mouse intravenous 446 mg/kg.
n-Hexane	110-54-3	LD50 Rat (older adult) oral 43.5 mg/kg BW	LC50 Mouse inhalation 48000 ppm/4 hr
Heptane	142-82-5	Not available	Not available
Octane	111-65-9	Not available	LC50 Rat inhalation 118 g/cu m/4 hr
Nonane	111-84-2	Not available	LC50 Rat inhalation 3200 ppm/4 hr
Decane	124-18-5	Not available	LC50 Mice inhalation 72.3 mg/l/2 hr
Undecane	1120-21-4	LD50 Mouse iv 517 mg/kg	Not available
Dodecane	112-40-3	Not available	Not available
Tridecane	629-50-5	LD50 iv Mouse 1161 mg/kg	Not available
Tetradecane	629-59-4	Not available	Not available
Pentadecane	629-62-9	LD50 iv Mouse 3493 mg/kg	Not available
Methylcyclopentane	96-37-7	N Av	Not available
Cyclohexane	110-82-7	LD50 Mouse oral 1.30 g/kg	Not available
methylcyclohexane	108-87-2	Not available	LC25 Rabbit inhalation 7300 ppm, 6 hr/day, 5 day/wk, 2 wk

CHRONIC EFFECTS/CARCINOGENICITY

Product contains benzene. Human health studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood forming system (particularly bone marrow), and serious blood disorders, such as leukemia. Benzene is listed by the National Toxicology Program (NTP), International Agency For Research on Cancer (IARC), and ACGIH as carcinogenic in humans.

Other potential chronic effects of exposure are : irritation eyes, skin, nose, mucous membrane, loss of fetus, cardiac arrythmias and CNS depression, polyneuropathy characterized by muscle weakness, loss of sensation, and impaired gait, respiratory system; dizziness, giddiness, vertigo, anorexia, vomiting, abdominal pain; dermatitis, excitement, confusion, euphoria, drowsiness, incoordination, staggered gait; corneal vacuolization; anorexia, nausea, vomiting, abdominal pain; dermatitis; lassitude (weakness, exhaustion), headache; dilated pupils, lacrimation (discharge of tears); anxiety, muscle fatigue, insomnia; paresthesia; liver, kidney damage, bone marrow depression; [potential occupational carcinogen], apnea, coma, convulsions; conjunctivitis, eye pain, photophobia (abnormal visual intolerance to light), corneal vesiculation; irritability, insomnia; gastrointestinal disturbance narcosis, coma, polyneuropathy characterized by muscle weakness, loss of sensation, and impaired gait.

Similar products produced skin cancer and skin tumors in laboratory animals following repeated applications. Condensates may contain some PAH's, which have been shown to be carcinogenic after repeated or prolonged skin contact in laboratory animals

12. ECOLOGICAL INFORMATION

Keep out of sewage, drainage and waterways. Report spills and releases, as applicable, under federal, provincial and

local regulations.

13. DISPOSAL CONSIDERATIONS

Maximize product recovery for reuse or recycling. Contaminated materials may be classified as a hazardous waste due to the low flash point and benzene. Empty containers can have residues that are subject to hazardous waste disposal requirements. Dispose of waste in accordance with all applicable federal, provincial, and/or local regulations.

14. TRANSPORT INFORMATION

PROPER SHIPPING NAME:	Petroleum Crude Oil
TDG CLASS:	3
TDG IDENTIFICATION NUMBER:	UN1267
TDG SHIPPING LABEL:	Flammable Liquid
SHIPPING DESCRIPTION:	Petroleum Crude Oil, 3, UN1267, PGI

15. REGULATORY INFORMATION

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

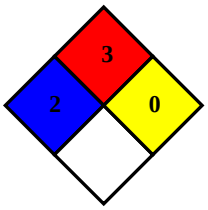
Workplace Hazardous Materials Information Systems (WHMIS): This product has been classified in accordance with the hazard criteria of the CPR (Controlled Product Regulations), and the MSDS contains all of the information required by the CPR.
Class B, Division 2 (Flammable Liquid)
D1A - Very Toxic Material Causing Immediate and Serious Toxic Effects
Class D, Division 2, Subdivision A (Very toxic by other means)
Class D, Division 2, Subdivision B(Toxic by other means)

This substance is listed on the Canadian Domestic Substances List (DSL).

16. OTHER INFORMATION

Issued by: Health and Safety Department, Plains Midstream Canada Telephone 403-261-7432
Technical Development by Deerfoot Consulting Inc. Telephone 403-720-3700

NFPA HAZARD RATING -	HEALTH:	2	High
	FIRE:	3	High
	REACTIVITY:	0	Negligible



Acronyms:

ANSI	=	American National Standards Institute
ACGIH	=	American Conference of Governmental Industrial Hygienists
API	=	American Petroleum Institute
CSA	=	Canadian Standards Association
HMIS	=	Hazardous Materials Information System
MSHA	=	Mine Safety and Health Administration
NAERG	=	North American Emergency Response Guide
NFPA	=	National Fire Protection Association

NIOSH	=	National Institute of Occupational Safety and Health
NTP	=	National Toxicology Program
OSHA	=	U.S. Occupational Safety & Health Administration
PAH	=	Poly-Aromatic Hydrocarbons
ppm	=	parts per million (volume/volume)
SCBA	=	Self-Contained Breathing Apparatus
STEL	=	Short Term Exposure Limit
TLV	=	Threshold Limit Value
TWA	=	Time Weighted Average
WHMIS	=	Workplace Hazardous Materials Information System - Canadian

Disclaimer of Expressed and Implied Warranties

The information presented in the Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. However, neither Plains Midstream Canada or Deerfoot Consulting Inc. or any of their subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use.