
DANGER


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WARNING

Safety Data Sheet

MSDS ID NO: 005
Revision date: April 2014

Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: Atmospheric natural gas liquids (NGL)
Synonyms: Gas distillate, gas condensate, field liquids, drip gas, casing head, retrograde gas, natural gasoline, wild gasoline
Chemical family: Aliphatic hydrocarbon
Formula: Mixture
Producer: EnLink Midstream, L.P.
2501 Cedar Springs Road
Suite 100
Dallas, TX 75201
www.EnLink.com

Emergency Line	866-394-9839	Available 24 hours	
CHEMTREC	800-424-9300	Available 24 hours	
EnLink	214-953-9500	Available during normal business hours	**Ask for Compliance Dept**

Section 2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Atmospheric NGL is a liquid hydrocarbon that may possess a rotten egg odor. It is a volatile and extremely flammable liquid that may cause flash fires. Keep away from heat, sparks and open flame. This material includes benzene, which may cause cancer or be toxic to blood-forming organs. Tanks or vessels may vent harmful concentrations of hydrogen sulfide (H_2S) gas, which can cause respiratory irritation and asphyxiation. Never siphon this product by mouth. If swallowed, this product may get sucked into the lungs (aspirated) and cause lung damage or even death.

OSHA-GHS Hazard Statements (Warning Label):
DANGER — Extremely Flammable Liquid and Vapor *(category 1)*
DANGER — May cause cancer *(category 1)*
WARNING — Harmful if inhaled *(category 4)*

Inhalation: Exposure to high vapor concentrations can cause respiratory irritation, central nervous system depression, headaches, dizziness, nausea, narcosis, incoordination and loss of consciousness. At extremely high concentrations and excessive exposure conditions, components of this product may produce cardiac sensitization. Aspiration (inadvertent suction) of liquid into the lungs can produce chemical pneumonia or even death.
This product contains hydrogen sulfide (H_2S). Exposure to H_2S vapors may cause pulmonary irritation, pulmonary edema or unconsciousness and may be fatal. Perception threshold ranges from 0.5 parts per trillion to 0.1 parts per million (ppm). There is a rapid loss of sense of smell on exposure to H_2S

concentrations above 150 ppm, which means the extent of exposure may be underestimated.
This product contains benzene, which may cause cancer or be toxic to blood-forming organs.

Ingestion: Ingestion may result in irritation of the mouth, throat or gastrointestinal tract, nausea, vomiting, diarrhea and central nervous system depression. Aspiration of liquid into the lungs must be avoided as even small quantities in the lungs can produce chemical pneumonitis, pulmonary edema/hemorrhage and even death.

Skin contact: Prolonged and repeated liquid contact can cause defatting and drying of the skin and can lead to irritation and/or dermatitis.

Eye contact: Eye irritation may result from contact with the liquid or exposure to vapor. Hydrogen sulfides (H_2S) may cause burning or tearing and visual disturbances at repeated exposures above the TLV®.

Carcinogenic evaluation: The International Agency for Research on Cancer (IARC) has determined that there is limited evidence for the carcinogenicity of naphtha (light straight run and light catalytic cracked) in experimental animals.

Name	IARC:	NTP:	ACGIH — carcinogens:	OSHA — Select carcinogens:
Natural gas condensate 68919-39-1	NE			
Benzene 71-43-2	Supplement 7 (1987) Monograph 29 (1982)	Known carcinogen Reasonably anticipated to be a carcinogen	A1 – Confirmed human carcinogen	Present

Section 3. MATERIAL COMPOSITION / INFORMATION ON INGREDIENTS

Name	CAS No.	Weight %
Natural gas condensate	68919-39-1	100
N-butane	106-97-8	2-20
Iso-butane	75-28-5	1-7
Benzene	71-43-2	0-5
N-hexane	110-54-3	1.5
Iso-pentane	78-78-4	0.5-5
N-pentane	109-66-0	0.5-5
Hydrogen sulfide	7783-06-4	0-2
Toulene	108-88-3	0-1.5
Cyclohexane	110-82-7	0-1.5
Ethylbenzene	100-41-4	0-1.5
C6 +	Mixture	1-15

NOTE: *The above are represented in ranges as estimates. Due to sources, components of natural gas condensate vary due to variations produced by a natural product.*

Section 4. FIRST AID MEASURES

Inhalation: Move affected person(s) to fresh air. If not breathing, breathing is difficult, or if no heartbeat, give artificial respiration and cardiopulmonary resuscitation (CPR) and/or administer oxygen as needed by trained personnel. Immediately call a physician.

Skin contact: Wash with soap and large amounts of tepid water (not to exceed 105°F) for at least 15 minutes. Remove and isolate contaminated shoes and clothing. Wash clothing and clean shoes thoroughly before reuse. If symptoms or irritation occur, call a physician.

Ingestion: If swallowed, do not induce vomiting and do not give liquids. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Immediately call a physician.

Eye contact: Check for and remove any contact lenses. Flush eyes with large amounts of tepid water for at least 15 minutes. If symptoms or irritation occur, call a physician.

Medical condition aggravated by exposure: Preexisting skin conditions and respiratory disorders may be aggravated by exposure to components of this product.

Section 5. FIREFIGHTING MEASURES

Suitable extinguishing media: For small fires — Class B fire-extinguishing media such as CO_2, dry chemical, foam (AFFF/ATC) or water spray can be used. Larger fires — water spray, fog or foam (AFFF/ATC) can be used. Firefighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.

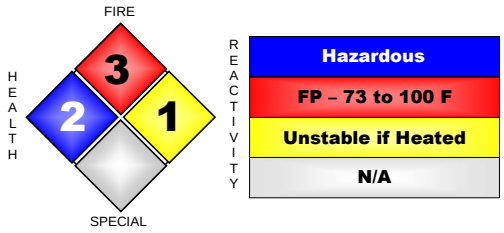
Specific hazards: This product has been determined to be a flammable liquid per the OSHA Hazard Communication Standard and should be handled accordingly. Vapors may travel along the ground or be moved by ventilation and ignited by many sources such as pilot lights, sparks, electric motors, static discharge or other ignition sources at locations distant from material handling. Flashback can occur along vapor trail. For additional fire-related information, see NFPA 30 or the North American Emergency Response Guide 128.
Bleve's point (boiling liquid expanding vapor explosions) can occur when liquid in a pressurized container in close proximity to a fire reaches a temperature well above its boiling point. Its effect could lead to a catastrophic failure of the vessel, resulting in flying equipment fragments, a shock wave and a fireball, causing serious damage and death. Isolate hazard area. If safe to do so, stop the flow of gas and allow fire to burn out. Extinguishing the flame before shutting off the supply can cause the formation of explosive mixtures. In some cases, it may be preferable to allow the flame to continue to burn. Avoid using straight water streams. Water may be ineffective in extinguishing low flash point fires, but can be used to cool exposed surfaces. Avoid excessive water spray application.

Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing from as far a distance as possible. Keep runoff water out of sewers and water sources.

Special protective equipment for firefighters: Firefighting may result in potential exposure to high heat, smoke or toxic byproducts of combustion. A self-contained breathing apparatus (SCBA) with full-face piece and full protective firefighting clothing should be worn.

NFPA rating:

Health:	**2**
Flammability:	**3**
Instability/reactivity:	**1**
Other:	**N/A**



Section 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Keep public away. Isolate and evacuate area. Shut off source if safe to do so. Eliminate all ignition sources. Dike far ahead of the liquid spill to prevent entry into sewers and waterways. Advise authorities and National Response Center (800-424-8802) if substance has entered a watercourse or sewer. Notify local health and pollution control agencies, if appropriate. Contain liquid with sand or soil. Recover and return free product to proper containers. Use suitable absorbent materials such as vermiculite, sand or clay to clean up residual liquids.

Section 7. HANDLING AND STORAGE

Handling: Comply with all applicable EPA, OSHA, NFPA and consistent state and local requirements. Use appropriate grounding and bonding practices. Store in properly closed containers that are appropriately labeled and in a cool, well-ventilated area. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. Do not cut, drill, grind or weld on empty containers since they may contain explosive residues. Avoid skin contact. Product should never be used as a solvent due to its flammable and potentially toxic properties. Siphoning by mouth can result in lung aspiration, which can be harmful or fatal. Exercise good personal hygiene, including removal of soiled clothing and prompt washing with soap and water.

Hydrocarbons are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering, pumping at high flow rates or loading and transfer operations. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids. Sudden release of hot organic chemical vapors or mists from process equipment operating under elevated temperatures and pressure or sudden ingress of air into vacuum equipment may result in ignitions without the presence of obvious ignition sources. Nozzle spouts must be kept in contact with the containers or tank during the entire filling operation.

Harmful concentrations of hydrogen sulfide (H_2S) gas can be generated and accumulate in storage tanks and reaction vessels. Sulfur-containing products may cause polysulfide deposits (iron sulfide) to form inside iron storage tanks. These pyrophoric deposits, upon exposure to air, can ignite spontaneously.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits:

Name	CAS No.	OSHA – PEL (ppm)	ACGIH® TLV® (ppm)	NIOSH REL (ppm)
Natural gas condensate	68919-39-1	Not established	Not established	Not established
N-butane	106-97-8	Not established	1,000 [A]	Not established
Iso-butane	75-28-5	Not established	Not established	800
Benzene	71-43-2	1 5 – STEL 0.5 ppm action level NOTE: REF 29 CFR 1910.1028	0.5 2.5 - STEL Skin – potential absorption	0.1 1 – STEL
N-hexane	110-54-3	500	50	50
Iso-pentane	78-78-4	1000	600 (pentane/isomers)	1000
N-pentane	109-66-0	1000	600	1000
Hydrogen sulfide	7783-06-4	20 ceiling 50 STEL (10-minute)	10 ppm 15 ppm STEL	20 ceiling 50 STEL (10-minute)
Toulene	108-88-3	200 ppm; 300 ceiling	20 ppm	200 ppm; 300 ceiling
Cyclohexane	110-82-7	300	100	300
Ethylbenzene	100-41-4	100	100 125 STEL	100
C6 +	Mixture	Not established	Not established	Not established

All exposure limits listed are 8-hour time weighted average (TWA) — except where noted otherwise.
Short-Term Exposure Limit (STEL) — a 15-minute TWA exposure period of time
[A] Aliphatic hydrocarbon gas (alkane C_1-C_4)

Engineering measures: Local or general exhaust required in an enclosed area or when there is inadequate ventilation. Use mechanical ventilation equipment that is intrinsically safe or explosion-proof.

PERSONAL PROTECTIVE EQUIPMENT:

Respiratory protection: Supplied air respirators should be used if operating conditions create airborne concentrations that exceed exposure limits for any individual components (including H_2S). Observe respirator protection factor criteria cited in ANSI Z88.2. Self-contained breathing apparatus should be used for firefighting.

Skin and body protection: Use nitrile rubber, viton or PVA gloves for repeated or prolonged skin exposure.

Eye protection: No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields.

Hygiene measures: No protective clothing is normally required. Use selective protective clothing depending on industrial operations. Avoid repeated or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove contaminated clothing and launder before reuse.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless liquid
Physical state (solid/liquid/gas):	Liquid
Substance type (pure/mixture):	Mixture
Color:	Clear
Odor:	Rotten egg
Molecular weight:	Not determined
pH:	N/A
Boiling point/range (5-95%):	-127° to 257°F
Melting point/range:	Not Determined
Decomposition temperature:	N/A
Specific gravity:	(H_2O = 1) 0.5/0.8
Vapor density:	(AIR = 1) 2.5/4.0
Vapor pressure:	10-30 PSI at 100°F
Evaporation rate:	(H_2O = 1) >1
Flash point:	-211° to 55°F
Auto-ignition temperature:	No data available
Flammable limits in air — lower (%):	1%
Flammable limits in air — upper (%):	13%

Section 10. STABILITY AND REACTIVITY

Stability:	The material is stable at 70°F, 760 mm pressure.
Polymerization:	Will not occur.
Hazardous decomposition products:	Combustion produces carbon monoxide, aldehydes, aromatic and other hydrocarbons
Materials to avoid:	Strong oxidizers such as nitrates, chlorates and peroxides
Conditions to avoid:	Sources of heat or ignition

Section 11. TOXICOLOGICAL INFORMATION

Acute toxicity:
Product information (toxicological data does not exist for this mixture):

Name	CAS No.	Inhalation:	Dermal:	Oral:
Natural gas condensate	68919-39-1	No data available	N/A	N/A
Hydrogen sulfide	7783-06-4	LC_{50} 500 ppm (rat)	N/A	N/A
Benzene	71-43-2	LC_{50} 10,000 ppm/7 hrs (rat)	N/A	LD_{50} 930 mg/kg
Toluene	108-88-3	LC_{50} 49,000 mg/m^3 /4 hrs (rat)	N/A	LD_{50} 636 mg/kg

Summary of health effect information on the product: ***refer to Hazard Section 2***

Section 12. ECOLOGICAL INFORMATION

Ecotoxicity effects: Product can cause fouling of shoreline and may be harmful to aquatic life in low concentrations. This product does not concentrate or accumulate in the food chain.

Section 13. DISPOSAL CONSIDERATIONS

Cleanup considerations: This product as produced is not specifically listed as an EPA RCRA hazardous waste according to federal regulations (40 CFR 261). However, when discarded or disposed of, it may meet the criteria of a "characteristic" hazardous waste. This product could also contain benzene at >0.5ppm and could exhibit the characteristics of "toxicity" (D018) as determined by the toxicity characteristic leaching procedure (TCLP). This material could become a hazardous waste if mixed or contaminated wit hazardous waste or other substance(s). It is the responsibility of the user to determine if disposal material is hazardous according to federal, state and local regulations.

Section 14. TRANSPORT INFORMATION

Transport information: This material when transported via U.S. commerce would be regulated by DOT regulations (please refer to 49 CFR 172.101).
Proper shipping name: Petroleum Products, n.o.s.
UN/identification no.: UN 1268
Hazard class: 3
Packing group: I (if boiling point is ≤95°F; ≤35°C);
II (if boiling point is >95°F; >35°C)
DOT reportable quantity (lbs): N/A

Section 15. REGULATORY INFORMATION

U.S. federal regulatory information:

US TSCA Chemical Inventory Section 8(b): This product and/or its components are listed on the TSCA Chemical Inventory.

OSHA Hazard Communication Standard: This product has been evaluated and determined to be hazardous as defined in the OSHA Hazard Communication Standard.

CERCLA/SARA Section	Hazardous substance	Reportable quantity	Emission
CERCLA/SARA 302	Hydrogen sulfide		
CERCLA/SARA 304	Hydrogen sulfide	=100 lb final RQ = 45.4 kg final RQ	None
CERCLA/SARA 304	Benzene	= 0.454 kg final RQ = 0.454 kg statutory RQ = 1 lb final RQ = 1lb statutory RQ = 10 lb final RQ = 10 lb final RQ — *receives an adjustable RQ of 10 lbs based on potential carcinogenicity in August 1989 — final rule* = 100 lb final RQ = 4.54 kg final RQ =4.54 kg final RQ — *receives an adjustable RQ of 10 lbs based on potential carcinogenicity in August 1989 — final rule* = 45.4 kg final RQ	
CERCLA/SARA 313	Benzene		= 0.1 percent *de minimis* concentration

ACUTE: **HEALTH HAZARD**
CHRONIC: **HEALTH HAZARD**
FIRE: **FIRE HAZARD**
REACTIVE: **NO**

SUDDEN RELEASE: **SUDDEN RELEASE OF PRESSURE**

NOTE: *User must consult with applicable state and local agencies for special specifics, determinations or compliance obligations regarding this product.*

Section 16. OTHER INFORMATION

The information and recommendations contained herein are based upon tests, data, and information resources believed to be reliable. However, EnLink Midstream, L.P., and its related operations or divisions (EnLink) do not guarantee the accuracy or completeness, nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of goods, the merchantability of the goods or the fitness of the goods for a particular purpose. Adjustment to conform to actual conditions of usage may be required. EnLink assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of this data. No warranty against infringement of any patent, copyright or trademark is made or implied.