# Safety Data Sheet

## Section 1: Identification

**Product Name:** Condensate

**Recommended Use:** Raw Material

**Manufacturer:**
Anadarko Petroleum Corporation
1201 Lake Robins Dr.
The Woodlands, TX 77380
United States
www.anadarko.com
(832) 636-1000 (General)

**Emergency Telephone Number:**
ChemTel: (831) 248-0585 (International)
(800) 255-3924 (North America)

## Section 2: Hazard Identification

**Classification:**

- Flammable Liquids 2
- Acute Toxicity Oral 4
- Aspiration 1
- Skin Irritation 2
- Eye Irritation 2
- Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
- Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
- Germ Cell Mutagenicity 1B
- Carcinogenicity 1A
- Reproductive Toxicity 1B
- Specific Target Organ Toxicity Repeated Exposure 1
- Specific Target Organ Toxicity Repeated Exposure 2

**Label Elements:**

**DANGER**

**Hazard Statements:**

- Highly flammable liquid and vapor.
- Harmful if swallowed.
- May be fatal if swallowed and enters airways.
- Causes skin irritation.
- Causes serious eye irritation.
- May cause respiratory irritation.
- May cause drowsiness or dizziness.
- May cause genetic defects.
- May cause cancer.
- May damage fertility or the unborn child.
- Causes damage to organs through prolonged or repeated exposure.
- May cause damage to organs through prolonged or repeated exposure.

**Precautionary Statements:**

**Prevention**

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
- Keep container tightly closed.
- Ground and/or bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting/equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Do not breathe mists, vapors, and/or spray.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Wear protective gloves, clothing, and eye/face protection.

**Response**

- In case of fire: Use appropriate media for extinction.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTER or doctor/physician if you feel unwell.
- If on skin: Wash with plenty of water.
- Take off contaminated clothing and wash before reuse.
- Specific treatment, see supplemental first aid information.
- If skin irritation occurs: Get medical advice/attention.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- Rinse mouth.
- Do NOT induce vomiting.
- IF exposed or concerned: Get medical advice/attention.

**Storage/Disposal**

- Store in a well-ventilated place. Keep container tightly closed.
- Keep cool.
- Store locked up.
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**Other information:**


**NFPA 704 Hazard Class**
Health: 2
Flammability: 3
Instability: 0

(0-Minimum, 1-Slight, 2-Moderate, 3-Serious, 4-Severe)

**HMIS Hazard Rating**

| | |
|---|---|
| **Health** | **2** |
| **Flammability** | **3** |
| **Physical Hazard** | **0** |

(0-Minimum, 1-Slight, 2-Moderate, 3-Serious, 4-Severe)

## Section 3: Composition/Information on Ingredients

| Component | CAS Number | Concentration |
|---|---|---|
| Natural Gas Condensate (Petroleum) | 64741-47-5 | 100% |
| Hexane | 110-54-3 | <25% |
| Xylene | 1330-20-7 | <15% |
| Toluene | 108-88-3 | <15% |
| Benzene | 71-43-2 | <4% |
| Ethlybenzene | 100-41-4 | <1% |

All concentrations are percent by weight unless ingredient is gas. Gas concentrations are in percent by volume.

Crude oil, natural gas and natural gas condensate can contain minor amounts of sulfur, nitrogen and oxygen containing organic compounds as well as trace amounts of heavy metals like mercury, arsenic, nickel, and vanadium. Composition can vary depending on the source of crude.

**Synonyms:** Casing Head Gas, Drip Gas

## Section 4: First-Aid Measures

**Inhalation:** Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Get medical attention.

**Skin:** In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing. Wash skin with soap and water. If irritation develops and persists, get medical attention.

**Eye:** In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.

**Ingestion:** Do NOT induce vomiting. Obtain medical attention immediately if ingested.

| | |
|---|---|
| **Most Important Symptoms and Effects, both Acute and Delayed:** | Refer to Section 11 - Toxicological Information. |
| **Notes to Physician:** | All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. |

## Section 5: Fire-Fighting Measures

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|---|---|
| **Suitable Extinguishing Media:** | Use dry chemical, carbon dioxide, or appropriate foam. |
| **Unsuitable Extinguishing Media:** | Solid streams of water may be ineffective and spread ignited material. |
| **Unusual Fire and Explosion Hazards:** | Containers may explode when heated.<br>Vapor explosion hazard indoors, outdoors or in sewers.<br>HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.<br>Many liquids are lighter than water.<br>Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).<br>Runoff to sewer may create fire or explosion hazard.<br>Vapors may form explosive mixtures with air.<br>Vapors may travel to source of ignition and flash back. |
| **Hazardous Combustion Products:** | Carbon Monoxide, Carbon Dioxide, smoke/soot, small amounts of nitrogen and sulfur oxides. |
| **Advice for Firefighters:** | Structural firefighters' protective clothing will only provide limited protection.<br>Wear positive pressure self-contained breathing apparatus (SCBA). Move containers from fire area if you can do it without risk.<br>LARGE FIRES: Cool containers with flooding quantities of water until well after fire is out. |

## Section 6: Accidental Release Measures

| | |
|---|---|
| **Personal Precautions:** | Ventilate enclosed areas. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. |
| **Emergency Procedures:** | As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. If tank, rail 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. LARGE SPILL: Consider initial downwind evacuation for at least 300 meters (1000 feet) ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Stay upwind. Keep out of low areas. |
| **Environmental Precautions:** | Prevent entry into waterways, sewers, basements or confined areas. |

**Methods for Containment and Clean-up:**

Stop leak if you can do it without risk.
Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
Use clean non-sparking tools to collect absorbed material.
A vapor suppressing foam may be used to reduce vapors.
All equipment used when handling the product must be grounded.
LARGE SPILLS: Dike far ahead of liquid spill for later disposal.
LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

## Section 7: Handling and Storage

**Precautions for Safe Handling:**

Use only with adequate ventilation. Keep away from heat, sparks, and flame. All equipment used when handling the product must be grounded. Dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe mist, vapors and/or spray. Avoid contact with skin, eyes, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

**Conditions for Safe Storage:**

Keep container tightly closed and properly labeled. Store in a cool/low-temperature, well-ventilated dry place away from heat and ignition sources.

## Section 8: Exposure Controls/Personal Protection

| Component | ACGIH | NIOSH | OSHA | Other |
|---|---|---|---|---|
| Ethylbenzene | TWA: 20 ppm | TWA: 100 ppm<br>TWA: 435 mg/m$^3$<br>STEL: 125 ppm<br>STEL: 545 mg/m$^3$ | TWA: 100 ppm<br>TWA: 435 mg/m$^3$ | |
| Benzene | STEL: 2.5 ppm<br>TWA: 0.5 ppm | STEL: 1 ppm<br>TWA: 0.1 ppm | Ceiling (Z-2 PEL): 25 ppm<br>STEL: 5 ppm<br>TWA (Z-2 PEL): 10 ppm<br>TWA: 1 ppm | |
| Toluene | TWA: 20 ppm | TWA: 100 ppm<br>TWA: 375 mg/m$^3$<br>STEL: 150 ppm<br>STEL: 560 mg/m$^3$ | Ceiling: 300 ppm<br>TWA: 200 ppm | |
| Xylene | TWA: 100 ppm<br>STEL: 150 ppm | TWA: 100 ppm<br>TWA: 435 mg/m$^3$<br>STEL: 150 ppm<br>STEL: 655 mg/m$^3$ | TWA: 100 ppm<br>TWA: 435 mg/m$^3$ | |
| Hexane | TWA: 50 ppm | TWA: 50 ppm<br>TWA: 180 mg/m$^3$ | TWA: 500 ppm<br>TWA: 1800 mg/m$^3$ | |

**Engineering Measures/Controls:**

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

| | |
|---|---|
| **Respiratory Protection:** | In case of insufficient ventilation, wear suitable respiratory equipment. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced. |
| **Eye/Face Protection:** | Wear chemical splash safety goggles. |
| **Skin/Body Protection:** | Wear appropriate gloves. |
| **Environmental Exposure Controls:** | Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste. |

## Section 9: Physical and Chemical Properties

| | |
|---|---|
| **Physical Form:** | Liquid |
| **Appearance:** | Clear to straw color liquid |
| **Color:** | Clear to straw |
| **Odor:** | Petroleum Odor |
| **Odor Threshold:** | No data available |
| **Boiling Point:** | -20 to 800°F (-28.89 to 426.67°C) |
| **Melting Point:** | No data available |
| **Decomposition Temperature:** | No data available |
| **pH:** | No data available |
| **Specific Gravity (water=1):** | 0.6 to 0.8 |
| **Water Solubility:** | Insoluble |
| **Viscosity:** | No data available |
| **Explosive Properties:** | No data available |
| **Oxidizing Properties:** | No data available |
| **Vapor Pressure:** | 26.67 to 66.67 kPa (200 to 500 mmHg) @ 68°F (20°C) |
| **Vapor Density (air=1):** | >1 |
| **Evaporation Rate (water=1):** | <1 |
| **VOC (Wt.):** | 100% |
| **VOC (Vol.):** | 100% |
| **Flash Point (TCC):** | -50°F (-45.6°C) |
| **UEL:** | 7.1% |
| **LEL:** | 1.2% |
| **Autoignition:** | >460°F (>237.78°C) |
| **Flammability (solid, gas):** | No data available |
| **Octanol/Water Partition Coefficient:** | No data available |

## Section 10: Stability and Reactivity

| | |
|---|---|
| **Reactivity:** | No dangerous reaction known under conditions of normal use. |
| **Chemical Stability:** | Stable under normal temperatures and pressures. |
| **Possibility of Hazardous Reactions:** | Hazardous polymerization will not occur. |
| **Conditions to Avoid:** | Keep away from heat, sparks and flame. |

**Incompatible Materials:** Oxidizers.

**Hazardous Decomposition Products:** Carbon Monoxide, Carbon Dioxide.

## Section 11: Toxicological Information

| Components | CAS Number | Acute Toxicity |
|---|---|---|
| Natural gas condensates (petroleum) (100%) | 64741-47-5 | Inhalation-Rat LC50: 600 mg/m³ |
| Benzene (< 4%) | 71-43-2 | Ingestion/Oral-Rat LD50: 930 mg/kg<br>Ingestion/Oral-Rat LD50: 1 mL/kg<br>Inhalation-Mouse LC50: 9980 ppm<br>Inhalation- Rat LC50: 6.5 mL/kg/4H |
| Toluene (< 15%) | 108-88-3 | Ingestion/Oral-Rat LD50: 636 mg/kg<br>Inhalation-Rat LC50: 49 g/m³ 4 Hour(s)<br>Inhalation-Mouse LC50: 19900 mg/m³ 7 Hour(s) |
| Xylene (< 15%) | 1330-20-7 | Ingestion/Oral-Rat LD50: 3910 mg/kg<br>Inhalation-Rat LC50: 4550 ppm 4 Hour(s) |
| Hexane (< 25%) | 110-54-3 | Ingestion/Oral-Rat LD50: 25 g/kg<br>Inhalation-Rat LC50: 48000 ppm 4 Hour(s)<br>Inhalation-Mouse LC50: 150000 mg/m³ 2 Hour(s) |
| Ethylbenzene (< 1%) | 100-41-4 | Ingestion/Oral-Rat LD50: 3500 mg/kg<br>Inhalation-Rat LC50: 55000 mg/m³ 2 Hour(s)<br>Inhalation-Mouse LC50: 35500 mg/m³ 2 Hour(s) |

**Potential Health Effects**

**Inhalation:** May cause respiratory irritation. May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.

**Skin:** Causes skin irritation.

**Eye:** Causes serious eye irritation.

**Ingestion:** Harmful if swallowed. Material may be aspirated into lungs during ingestion and/or subsequent vomiting. Aspiration of this material will cause severe lung injury, chemical pneumonitis, pulmonary edema or death.

**Chronic (Delayed):** Chronic exposure to Hexane may produce important peripheral neuropathy (motor sensory). Chronic exposure to benzene results primarily in hematotoxicity, including aplastic anemia, pancytopenia, or any combination of anemia, leukopenia, and thrombocytopenia. CNS depression has been reported to occur in chronic abusers exposed to high levels of toluene. Symptoms include drowsiness, ataxia, tremors, cerebral atrophy, nystagmus (involuntary eye movements), and impaired speech, hearing, and vision. Neurobehavioral effects have been observed in occupationally exposed workers.

**Mutagenic Effects:** Repeated and prolonged exposure may cause mutagenic effects.

**Carcinogenic Effects:** This product contains Polycyclic Aromatic Hydrocarbons (PAHs), which are considered as carcinogens by many research and governmental agencies, and contains Benzene, which is similarly considered carcinogenic.

| Carcinogenic Effects | | | | |
|---|---|---|---|---|
| | **CAS** | **OSHA** | **IARC** | **NTP** |
| Ethylbenzene | 100-41-4 | Not Listed | Group 2B-Possible Carcinogen | Not Listed |
| Benzene | 71-43-2 | Specifically Regulated Carcinogen | Group 1-Carcinogenic | Known Human Carcinogen |

**Reproductive Effects:** Repeated and prolonged exposure may affect the reproductive system.

## Section 12: Ecological Information

**Toxicity:** Material data lacking.

**Persistence and Degradability:** Material data lacking.

**Bioaccumulative Potential:** Material data lacking.

**Mobility in Soil:** Material data lacking.

**Other Adverse Effects:** No studies have been found.

## Section 13: Disposal Considerations

**Product Waste:** Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**Packaging Waste:** Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## Section 14: Transport Information

| | **UN Number** | **UN Proper Shipping Name** | **Transport Hazard Class(es)** | **Packing Group** |
|---|---|---|---|---|
| **DOT** | UN3295 | Hydrocarbons, liquid, n.o.s. | 3 | II |
| **TDG** | UN3295 | Hydrocarbons, liquid, n.o.s. | 3 | II |
| **IMO/IMDG** | UN3295 | Hydrocarbons, liquid, n.o.s. | 3 | II |
| **IATA/ICAO** | UN3295 | Hydrocarbons, liquid, n.o.s. | 3 | II |

**Special Precautions for User:** None specified.

**Transport in bulk according to Annex II Of MARPOL 73/78 and the IBC Code:** No data available.

## Section 15: Regulatory Information

**CERCLA/SARA – Section 311/312 (Title III Hazard Categories)**
Acute Health: Yes
Chronic Health: Yes
Fire Hazard: Yes
Pressure Hazard: No
Reactive Hazard: No

**CERCLA/SARA – Section 313 and 40 CFR 372**
This material contains the following chemicals subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR 372:

| Component | De minimis |
|---|---|
| Ethylbenzene | 0.1% |
| Toluene | 1.0% |
| Xylene | 1.0% |
| Benzene | 0.1% |
| Hexane | 1.0% |

**California Proposition 65**
Warning: This material may contain detectable quantities of the following chemicals, known to the State of California to cause cancer, birth defects or other reproductive harm, and which may be subject to the warning requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

| Component | Type of Toxicity |
|---|---|
| Toluene | Developmental Toxicant<br>Female Reproductive Toxicant |
| Benzene | Cancer<br>Developmental Toxicant<br>Male Reproductive Toxicant |
| Ethybenzene | Cancer |

**International Hazard Classification**

**Canada:**
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by Regulations.

**WHMIS Hazard Class:**
B2
D2B

**National Chemical Inventories**

| Component | CAS Number | TSCA |
|---|---|---|
| Natural Gas Condensate | 64741-47-5 | Yes |
| Benzene | 71-43-2 | Yes |
| Toluene | 108-88-3 | Yes |
| Xylene | 1330-20-7 | Yes |
| Hexane | 110-54-3 | Yes |
| Ethylbenzene | 100-41-4 | Yes |

## Section 16: Other Information

**Last Revision Date:** 3/October/2012

**Preparation Date:** 29/May/2015

**Other Information:** Version 1

**Disclaimer/Statement of Liability:** The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor makes no warranties, expressed or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose or course of performance or usage of trade. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

**Key to abbreviations**

NDA = No data available
LD = Lethal Dose
TC = Toxic Concentration
D = Toxic Dose
ACGIH = American Conference of Governmental Industrial Hygiene
NIOSH = National Institute of Occupational Safety and Health
OSHA = Occupational Safety and Health Administration
STEL = Short Term Exposure Limits are based on 15-minute exposures
TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures