SAFETY DATA SHEET

Raw Natural Gas Liquids (Raw NGL)
Version 1.2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product information
Product Name: Raw Natural Gas Liquids (Raw NGL)
Material: 1012520, 1012523, 1012525, 1012524, 1012522, 1012521

Company: Chevron Phillips Chemical Company LP
10001 Six Pines Drive
The Woodlands, TX 77380

Emergency telephone:
Health:
866.442.9628 (North America)
1.832.813.4984 (International)

Transport:
CHEMTREC 800.424.9300 or 703.527.3887 (international)
Asia: CHEMWATCH (+61 2 9186 1132) China: 0532 8388 9090
EUROPE: BIG +32.14.584545 (phone) or +32.14.583516 (telefax)
Mexico CHEMTREC 01-800-681-9531 (24 hours)
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600
Argentina: +(54)-1159839431

Responsible Department: Product Safety and Toxicology Group
E-mail address: SDS@CPChem.com
Website: www.CPChem.com

SECTION 2: Hazards identification

Classification of the substance or mixture
This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

Classification:
- Flammable liquids, Category 2
- Skin irritation, Category 2
- Germ cell mutagenicity, Category 1B
- Carcinogenicity, Category 1A
- Reproductive toxicity, Category 2
- Specific target organ systemic toxicity - single exposure
- Category 3, Central nervous system
- Specific target organ systemic toxicity - repeated exposure

SDS Number: 100000102091

1/17
SAFETY DATA SHEET

Raw Natural Gas Liquids (Raw NGL)

Version 1.2
Revision Date 2018-08-17

Category 2, Nervous system
Aspiration hazard, Category 1

Labeling

Symbol(s):  

Signal Word: Danger

Hazard Statements:  
H225: Highly flammable liquid and vapor.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H336: May cause drowsiness or dizziness.
H340: May cause genetic defects.
H350: May cause cancer.
H361: Suspected of damaging fertility or the unborn child.
H373: May cause damage to organs (Nervous system) through prolonged or repeated exposure.

Precautionary Statements:

Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/fume/gas/mist/vapor/spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P321 Specific treatment (see supplemental first aid instructions on this label).
P331 Do NOT induce vomiting.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:
P403 + P233 Store in a well-ventilated place. Keep container...
SAFETY DATA SHEET

Raw Natural Gas Liquids (Raw NGL)

Version 1.2

Revision Date 2018-08-17


tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity:

IARC
Group 1: Carcinogenic to humans
Benzene 71-43-2
Group 2B: Possibly carcinogenic to humans
Natural gas (petroleum), raw liq. mix 64741-48-6

NTP
Known to be human carcinogen
Benzene 71-43-2

ACGIH
Confirmed human carcinogen
Benzene 71-43-2

SECTION 3: Composition/information on ingredients

Synonyms:
Raw NGL
Natural Gas Liquids - Y Grade

Molecular formula: UVCB

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural gas (petroleum), raw liq. mix</td>
<td>64741-48-6</td>
<td>100</td>
</tr>
<tr>
<td>n-hexane</td>
<td>110-54-3</td>
<td>0 - 30</td>
</tr>
<tr>
<td>Benzene</td>
<td>71-43-2</td>
<td>0 - 5</td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>7783-06-4</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

General advice:
Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.

If inhaled:
Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.

In case of skin contact:
If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact:
Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed:
Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

SDS Number: 100000102091
3/17
SECTION 5: Firefighting measures

Flash point : < -73 °C (< -99 °F)
Suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical.
Unsuitable extinguishing media : High volume water jet.
Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.
Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.
Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
Fire and explosion protection : Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

SECTION 6: Accidental release measures

Personal precautions : Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7: Handling and storage

Handling
Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited.
in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion: Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Storage

Requirements for storage areas and containers: No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8: Exposure controls/personal protection

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>US</th>
<th>Components</th>
<th>Basis</th>
<th>Value</th>
<th>Control parameters</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural gas (petroleum), raw liq. mix</td>
<td>OSHA Z-1</td>
<td>TWA</td>
<td>500 ppm, 2,000 mg/m³</td>
<td>(b).</td>
</tr>
<tr>
<td></td>
<td>OSHA Z-1-A</td>
<td>TWA</td>
<td>400 ppm, 1,600 mg/m³</td>
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<tr>
<td></td>
<td>n-hexane</td>
<td>ACGIH</td>
<td>TWA</td>
<td>50 ppm,</td>
<td>CNS impair, eye irri, peripheral neuropathy, BEI, Skin,</td>
</tr>
<tr>
<td></td>
<td>OSHA Z-1</td>
<td>TWA</td>
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<td>(b).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z-1-A</td>
<td>TWA</td>
<td>50 ppm, 180 mg/m³</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Benzene</td>
<td>ACGIH</td>
<td>TWA</td>
<td>0.5 ppm, leukemia, BEI, A1, Skin,</td>
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<tr>
<td></td>
<td>ACGIH</td>
<td>STEL</td>
<td>2.5 ppm, leukemia, BEI, A1, Skin,</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z-1-A</td>
<td>TWA</td>
<td>1 ppm,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z-1-A</td>
<td>CEIL</td>
<td>5 ppm,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z-2</td>
<td>Peak</td>
<td>50 ppm,</td>
<td>(a).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA 29 CFR 1910.1028(c)</td>
<td>TWA</td>
<td>1 ppm,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA 29 CFR 1910.1028(c)</td>
<td>STEL</td>
<td>5 ppm,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA CARC</td>
<td>PEL</td>
<td>1 ppm,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA CARC</td>
<td>STEL</td>
<td>5 ppm,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hydrogen Sulfide</td>
<td>ACGIH</td>
<td>TWA</td>
<td>1 ppm, CNS impair, URT irri,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ACGIH</td>
<td>STEL</td>
<td>5 ppm, CNS impair, URT irri,</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>OSHA Z-2</td>
<td>CEIL</td>
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<td>OSHA Z-2</td>
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<td></td>
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<tr>
<td></td>
<td>OSHA Z-1-A</td>
<td>TWA</td>
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</tr>
<tr>
<td></td>
<td>OSHA Z-1-A</td>
<td>STEL</td>
<td>15 ppm, 21 mg/m³</td>
<td></td>
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</tr>
</tbody>
</table>

(a) This standard applies to the industry segments exempt from the 1 ppm 8-hour TWA and 5 ppm STEL of the benzene standard at 1910.1028.
(b) The value in mg/m³ is approximate.
A1 Confirmed human carcinogen
BEI Substances for which there is a Biological Exposure Index or Indices (see BEI® section)
CNS impair Central Nervous System impairment
eye irri Eye irritation
leukemia Leukemia
Peripheral neuropathy
Skin Danger of cutaneous absorption
URT irri Upper Respiratory Tract irriation
Immediately Dangerous to Life or Health Concentrations (IDLH)

<table>
<thead>
<tr>
<th>Substance name</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-hexane</td>
<td>110-54-3</td>
<td>Immediately Dangerous to Life or Health Concentration</td>
<td>1995-03-01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Value 1100 parts per million</td>
<td></td>
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<tr>
<td>Benzene</td>
<td>71-43-2</td>
<td>Immediately Dangerous to Life or Health Concentration</td>
<td>1995-03-01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Value 500 parts per million</td>
<td></td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>7783-06-4</td>
<td>Immediately Dangerous to Life or Health Concentration</td>
<td>1995-03-01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Value 100 parts per million</td>
<td></td>
</tr>
</tbody>
</table>

Engineering measures

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the workplace when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

Respiratory protection: Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Air-Purifying Respirator for Organic Vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

Hand protection: The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection: Eye wash bottle with pure water. Tightly fitting safety goggles.

Skin and body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate: Flame retardant antistatic protective clothing. Workers should wear antistatic footwear.

Hygiene measures: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

SDS Number: 100000102091 6/17
### Appearance

**Form**: Liquid  
**Physical state**: Liquid  
**Color**: Colorless  
**Odor**: gasoline-like, Rotten eggs, Sulfurous

### Safety data

- **Flash point**: $< -73 \, ^\circ C \, (< -99 \, ^\circ F)$  
- **Molecular formula**: UVCB  
- **pH**: Not applicable  
- **Vapor pressure**: 150.00 - 200.00 PSI  
  at 37.8 °C (100.0 °F)  
- **Density**: 0.5 - 0.7 g/cm³  
  at 20 °C (68 °F)  
- **Water solubility**: Negligible

### SECTION 10: Stability and reactivity

**Chemical stability**: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Possibility of hazardous reactions**

**Hazardous reactions**: Further information: No decomposition if stored and applied as directed.

Hazardous reactions: Vapors may form explosive mixture with air.

**Conditions to avoid**: Heat, flames and sparks.

**Other data**: No decomposition if stored and applied as directed.

### SECTION 11: Toxicological information

**Raw Natural Gas Liquids (Raw NGL)**

- **Acute oral toxicity**:  
  - LD50 Oral: $> 5,000 \, \text{mg/kg}$  
  - Species: Rat  
  - Method: Acute toxicity estimate

**Raw Natural Gas Liquids (Raw NGL)**

- **Acute inhalation toxicity**: Hazardous quantities of hydrogen sulfide (H2S) may be present. Whenever a potential for exceeding 0.5 ppm (one-half the ACGIH TLV) exists, detection and monitoring of
hydrogen sulfide should occur. Since the sense of smell cannot be relied upon to detect the presence of H2S, the concentration should be measured by the use of fixed or portable devices.

Raw Natural Gas Liquids (Raw NGL)
Acute dermal toxicity : LD50 Dermal: > 2,000 mg/kg
Species: Rabbit
Method: Acute toxicity estimate

Raw Natural Gas Liquids (Raw NGL)
Skin irritation : May cause skin irritation in susceptible persons.

Raw Natural Gas Liquids (Raw NGL)
Eye irritation : Vapors may cause irritation to the eyes, respiratory system and the skin.

Raw Natural Gas Liquids (Raw NGL)
Sensitization : No data available.

Repeated dose toxicity
n-hexane : Species: Rat, male
Sex: male
Application Route: Inhalation
Dose: 3,000 ppm
Exposure time: 16 wks
Number of exposures: 12 h/d
Lowest observable effect level: 3,000 ppm
Target Organs: Peripheral nervous system
Raw Natural Gas Liquids (Raw NGL)

Species: Mouse, female  
Sex: female  
Application Route: Inhalation  
Dose: 500, 1,000, 4,000, 10,000 ppm  
Exposure time: 13 wks  
Number of exposures: 6h or 22h (1,000 ppm)/ 5d/wk  
Lowest observable effect level: 500 ppm  
Target Organs: Nose

Species: Mouse, male  
Sex: male  
Application Route: Inhalation  
Dose: 500, 1,000, 4000, 10,000 ppm  
Exposure time: 13 wks  
Number of exposures: 6h or 22h (1,000 ppm)/d, 5d/wk  
NOEL: 500 ppm  
Lowest observable effect level: 1,000 ppm  
Target Organs: Nose

Species: Rat, male  
Sex: male  
Application Route: Oral gavage  
Dose: 568, 1,135, 3,973 mg/kg bw/day  
Exposure time: 90 or 120 days  
Number of exposures: Daily or 5d/wk (120-d study)  
NOEL: 568 mg/kg bw/day  
Lowest observable effect level: 1135 mg/kg bw/day

Species: Rat, female  
Sex: female  
Application Route: Oral gavage  
Dose: 0, 25, 50, 100 mg/kg  
Exposure time: 103 wk  
Number of exposures: 5 d/wk  
NOEL: < 25 mg/kg  
Lowest observable effect level: 25 mg/kg

Species: Rat, male  
Sex: male  
Application Route: Oral gavage  
Dose: 0, 50, 100, 200 mg/kg  
Exposure time: 103 wk  
Number of exposures: 5 d/wk  
NOEL: < 50 mg/kg  
Lowest observable effect level: 50 mg/kg

Species: Mouse  
Application Route: Oral gavage  
Dose: 0, 25, 50,100 mg/kg  
Exposure time: 103 wk  
NOEL: < 25 mg/kg

**Carcinogenicity**

**n-hexane**:  
Species: Rat  
Dose: 0.043, 900, 3,000, 9,016 ppm  
Exposure time: 2 yrs  
Number of exposures: 6 h/d, 5 d/wk  
Remarks: No evidence of carcinogenicity, Information given is
based on data obtained from similar substances.

Species: Mouse
Sex: male and female
Dose: 0.039, 900, 3,000, 9,018 ppm
Exposure time: 2 yrs
Number of exposures: 6 h/d, 5 d/wk
Remarks: No evidence of carcinogenicity, Information given is based on data obtained from similar substances.

Benzene
Species: Rat
Sex: female
Dose: 0, 25, 50, 250 mg/kg
Exposure time: 103 wks
Number of exposures: daily, 5 days/week
Test substance: yes
Remarks: zymbal gland carcinomas, squamous cell papillomas

Species: Rat
Sex: male
Dose: 0, 50, 100, 200 mg/kg
Exposure time: 103 wks
Number of exposures: daily, 5 days/week
Test substance: yes
Remarks: zymbal gland carcinomas, squamous cell papillomas

Species: Mouse
Sex: male and female
Dose: 25, 50, 100 mg/kg
Exposure time: 103 wks
Number of exposures: daily, 5 days/week
Test substance: yes
Remarks: Clear evidence of multiple organ carcinogenicity.

Reproductive toxicity
n-hexane
Species: Rat
Sex: male
Application Route: Inhalation
Dose: 5,000 ppm
Number of exposures: 16 hr/d, 6 d/wk
Test period: 6 wks
permanent testicular damage characterized by loss of germ-cell line

Developmental Toxicity
n-hexane
Species: Rat
Application Route: Inhalation
Dose: 200, 1,000, 5,000 ppm
Number of exposures: 20 hr/d, daily
Test period: GD 6-20
NOAEL Teratogenicity: 200 ppm
NOAEL Maternal: 200 ppm
Species: Mouse  
Application Route: Inhalation  
Dose: 200, 1,000, 5,000 ppm  
Number of exposures: 20 hr/d, daily  
Test period: GD 6-17  
NOAEL Maternal: 1,000 ppm

**Raw Natural Gas Liquids (Raw NGL)**  
**Aspiration toxicity**: May be fatal if swallowed and enters airways.

**CMR effects**  
Natural gas (petroleum), raw liq. mix:  
Carcinogenicity: Possible human carcinogen  
Mutagenicity: In vivo tests showed mutagenic effects  
Teratogenicity: Not available  
Reproductive toxicity: Not available

n-hexane:  
Carcinogenicity: Not classifiable as a human carcinogen.  
Mutagenicity: Did not show mutagenic effects in animal experiments.  
Teratogenicity: Animal testing did not show any effects on fetal development.  
Reproductive toxicity: Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

Benzene:  
Carcinogenicity: Human carcinogen.  
Mutagenicity: In vivo tests showed mutagenic effects  
Teratogenicity: Did not show teratogenic effects in animal experiments.  
Reproductive toxicity: Animal testing did not show any effects on fertility.

**Raw Natural Gas Liquids (Raw NGL)**  
**Further information**: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

**SECTION 12: Ecological information**

**Toxicity to fish**

n-hexane:  
LL50: 12.51 mg/l  
Exposure time: 96 h  
Species: Oncorhynchus mykiss (rainbow trout)  
Method: QSAR modeled data

Benzene:  
LC50: 5.3 mg/l  
Exposure time: 96 h  
Species: Oncorhynchus mykiss (rainbow trout)  
flow-through test Test substance: yes  
Method: OECD Test Guideline 203

**Toxicity to daphnia and other aquatic invertebrates**
### Toxicity to algae

**n-hexane**
- **EL50**: 21.85 mg/l  
  - Exposure time: 48 h  
  - Species: *Daphnia magna* (Water flea)  
  - Method: QSAR modeled data

**Benzene**
- **EC50**: 10 mg/l  
  - Exposure time: 48 h  
  - Species: *Daphnia magna* (Water flea)  
  - Method: OECD Test Guideline 202

**Hydrogen Sulfide**
- **EC50**: 0.12 mg/l  
  - Exposure time: 48 h  
  - Species: *Daphnia magna* (Water flea)  
  - Method: OECD Test Guideline 202

---

**Biodegradability**
- This material is not expected to be readily biodegradable.

**Elimination information (persistence and degradability)**

**Bioaccumulation**
- **n-hexane**
  - Bioconcentration factor (BCF): 501  
  - Does not significantly accumulate in organisms.

**Results of PBT assessment**
- This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

**Additional ecological information**
- An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

---

**Ecotoxicology Assessment**

**Short-term (acute) aquatic hazard**
- Toxic to aquatic life.
Raw Natural Gas Liquids (Raw NGL)

Long-term (chronic) aquatic hazard: Toxic to aquatic life with long lasting effects.
Toxicity Data on Soil: No data available
Other organisms relevant to the environment: No data available
Impact on Sewage Treatment: No data available

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped.
Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).
Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)
UN3295, HYDROCARBONS, LIQUID, N.O.S., (NATURAL GAS (PETROLEUM), RAW LIQUID, MIX, HEXANE), 3, I, RQ (HYDROGEN SULFIDE, BENZENE)

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)
UN3295, HYDROCARBONS, LIQUID, N.O.S., (NATURAL GAS (PETROLEUM), RAW LIQUID, MIX, HEXANE), 3, I, (≤ 73 °C), MARINE POLLUTANT, (HYDROGEN SULFIDE, HEXANE)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)
UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, I

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))
UN3295, HYDROCARBONS, LIQUID, N.O.S., (NATURAL GAS (PETROLEUM), RAW LIQUID, MIX, HEXANE), 3, I, (D/E), ENVIRONMENTALLY HAZARDOUS, (HYDROGEN SULFIDE, HEXANE)
Raw Natural Gas Liquids (Raw NGL)

Version 1.2

Revision Date 2018-08-17

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))
UN3295, HYDROCARBONS, LIQUID, N.O.S., (NATURAL GAS (PETROLEUM), RAW LIQUID, MIX, HEXANE), 3, I, ENVIRONMENTALLY HAZARDOUS, (HYDROGEN SULFIDE, HEXANE)

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)
UN3295, HYDROCARBONS, LIQUID, N.O.S., (NATURAL GAS (PETROLEUM), RAW LIQUID, MIX, HEXANE), 3, I, ENVIRONMENTALLY HAZARDOUS, (HYDROGEN SULFIDE, HEXANE)

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

National legislation

SARA 311/312 Hazards: Flammable (gases, aerosols, liquids, or solids)
Skin corrosion or irritation
Germ cell mutagenicity
Carcinogenicity
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)
Aspiration hazard

CERCLA Reportable Quantity: 667 lbs
Benzene

SARA 302 Reportable Quantity: Calculated RQ exceeds reasonably attainable upper limit.
Hydrogen Sulfide

SARA 302 Threshold Planning Quantity: The following components are subject to reporting levels established by SARA Title III, Section 302:
Hydrogen Sulfide 7783-06-4 500 lbs

SARA 304 Reportable Quantity: Calculated RQ exceeds reasonably attainable upper limit.
Hydrogen Sulfide 7783-06-4 100 lbs

SARA 313 Components: The following components are subject to reporting levels established by SARA Title III, Section 313:
n-hexane - 110-54-3
Benzene - 71-43-2

SDS Number: 100000102091 14/17
Clean Air Act

Ozone-Depletion: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):
   - n-hexane - 110-54-3
   - Benzene - 71-43-2

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):
   - Hydrogen Sulfide - 7783-06-4

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):
   - Benzene - 71-43-2

US State Regulations

Pennsylvania Right To Know
   - n-hexane - 110-54-3
   - Benzene - 71-43-2
   - Hydrogen Sulfide - 7783-06-4

New Jersey Right To Know
   - n-hexane - 110-54-3
   - Benzene - 71-43-2

California Prop. 65 Components: WARNING! This product contains a chemical known in the State of California to cause cancer.

   WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

Notification status

Europe REACH: Not in compliance with the inventory
United States of America (USA) TSCA: On TSCA Inventory
Canada DSL: All components of this product are on the Canadian DSL
Australia AICS: On the inventory, or in compliance with the inventory
New Zealand NZIoC: Not in compliance with the inventory
Japan ENCS: Not in compliance with the inventory
NFPA Classification : Health Hazard: 2  
                      Fire Hazard: 3  
                      Reactivity Hazard: 0

Further information

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

<table>
<thead>
<tr>
<th>Key or legend to abbreviations and acronyms used in the safety data sheet</th>
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<tbody>
<tr>
<td><strong>ACGIH</strong></td>
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<td><strong>LD50</strong></td>
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<td><strong>AICS</strong></td>
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<td><strong>LOAEL</strong></td>
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<td><strong>DSL</strong></td>
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<td><strong>TWA</strong></td>
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## Raw Natural Gas Liquids (Raw NGL)

<table>
<thead>
<tr>
<th>ENCS</th>
<th>Japan, Inventory of Existing and New Chemical Substances</th>
<th>TSCA</th>
<th>Toxic Substance Control Act</th>
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<tbody>
<tr>
<td>KECI</td>
<td>Korea, Existing Chemical Inventory</td>
<td>UVCB</td>
<td>Unknown or Variable Composition, Complex Reaction Products, and Biological Materials</td>
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<tr>
<td>&lt;=</td>
<td>Less Than or Equal To</td>
<td>WHMIS</td>
<td>Workplace Hazardous Materials Information System</td>
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<tr>
<td>LC50</td>
<td>Lethal Concentration 50%</td>
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