Safety Data Sheet

Section 1: Identification

Product Name: Natural Gasoline (Sour)

Recommended Use: Raw Mixture

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 1
- Aspiration 1
- Skin Irritation 2
- Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
- Carcinogenicity 1B

Label Elements:

DANGER

Hazard Statements:

- Highly flammable liquid and vapor.
- May be fatal if swallowed and enters airways.
- Causes skin irritation.
- May cause drowsiness or dizziness.
- May cause genetic defects.
- May cause cancer.
- May contain or release hydrogen sulfide gas.

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.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Wash thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Wear protective gloves/protective clothing/eye protection/face protection.

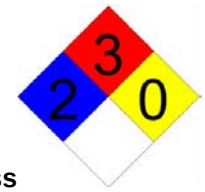
Response

- In case of fire: Use appropriate media for extinction.
- If on skin: Wash with plenty of water.
- 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 (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- 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.
- 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	**3**
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 Gasoline	68425-31-0	100%
Benzene	71-43-2	<1%
Hydrogen Sulfide (gas)	7783-06-4	varies

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: None

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. If signs/symptoms continue, get medical attention.

Skin: Wash skin with soap and water. Take off contaminated clothing and wash before reuse. 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. Do not use mouth-to-mouth method if victim ingested the substance. Give plenty of water to drink. 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

Suitable Extinguishing Media: Dry chemical, carbon dioxide, or foam is recommended. Water spray is recommended to cool or protect exposed materials or structures.

Unsuitable Extinguishing Media: Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters.

Unusual Fire and Explosion Hazards:	Containers may explode when heated. Vapor explosion hazard indoors, outdoors or in sewers. HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Liquids is lighter than water. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Runoff to sewer may create fire or explosion hazard. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.
Hazardous Combustion Products:	Carbon Monoxide, Carbon Dioxide, Sulfur Oxides, Hydrocarbon Vapors, Smoke.
Advice for Firefighters:	Structural firefighters' protective clothing will only provide limited protection. Wear positive pressure self-contained breathing apparatus (SCBA). Move containers from fire area if you can do it without risk. 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. Ventilate closed spaces before entering.
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: Water spray may reduce vapor; but may not prevent ignition in closed spaces. LARGE SPILLS: Dike far ahead of spill for later disposal.

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: Store in a cool/low-temperature, well-ventilated dry place away from heat and ignition sources. Keep away from incompatible materials.

Section 8: Exposure Controls/Personal Protection

Component	ACGIH	NIOSH	OSHA	Other
Natural Gasoline	TWA: 300 ppm			
Hydrogen Sulfide	STEL: 5 ppm TWA: 1 ppm	Ceiling (10 min): 10 ppm Ceiling (10 min): 15 mg/m^3	Ceiling: 20 ppm	Ceiling (Wyoming): 10 ppm
Benzene	STEL: 2.5 ppm TWA: 0.5 ppm	STEL: 1 ppm TWA: 0.1 ppm	Ceiling (Z-2 PEL): 25 ppm STEL: 5 ppm TWA (Z-2 PEL): 10 ppm TWA: 1 ppm	

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. Use explosion-proof electrical/ventilating/lighting/equipment.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/Face Protection: Wear chemical splash safety goggles.

Skin/Body Protection: Gloves constructed of nitrile, neoprene, or PVC are recommended. Chemical protective clothing such as of E.I. DuPont Tyvek QC®, Saranex®, TyChem® or equivalent recommended based on degree of exposure.

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 liquid
Color:	Colorless
Odor:	Petroleum Odor; Rotten egg/sulfurous
Odor Threshold:	No data available
Boiling Point:	>80°F (26.7°C)
Melting Point:	No data available
Decomposition Temperature:	No data available
pH:	No data available
Specific Gravity (water=1):	0.687
Water Solubility:	Negligible
Viscosity:	No data available
Explosive Properties:	No data available
Oxidizing Properties:	No data available
Vapor Pressure:	350 - 760 mmHg @ 100°F (37.78°C)
Vapor Density (air=1):	>1
Evaporation Rate (Butyl Acetate=1):	>1
VOC (Wt.):	No data available
Flash Point (TCC):	-70°F (-57°C)
UEL:	7.4%
LEL:	1.4%
Autoignition:	No data available
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:	High temperatures, open flames, other ignition sources.
Incompatible Materials:	Strong oxidizers, strong acids.
Hazardous Decomposition Products:	Fire Conditions only - Carbon Monoxide, Carbon Dioxide, Hydrocarbon Vapors, Smoke, Sulfur oxides and small amounts of nitrogen.

Section 11: Toxicological Information

Components	CAS Number	Acute Toxicity
Natural Gasoline (100%)	68425-31-0	Ingestion/Oral-Rat LD50: 18.8 mL/kg Inhalation-Rat LC50: 20.7 mL/L/ Unknown Time
Hydrogen Sulfide (varies)	7783-06-4	Inhalation-Rat LC50 : 444 ppm 4 Hour(s)
Benzene (<1%)	71-43-2	Ingestion/Oral-Rat LD50: 930 mg/kg Ingestion/Oral-Rat LD50: 1 mL/kg Inhalation-Mouse LC50: 9980 ppm Inhalation- Rat LC50: 6.5 mL/kg/4H

Potential Health Effects

Inhalation: 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: 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): No data available.

Mutagenic Effects: Chromosomal abnormalities have been found in people exposed to benzene a component of this material. Micronuclei and DNA damage have been found in human lymphocyteas and in mice.

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
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	UN1203	Gasoline	3	II
TDG	UN1203	Gasoline	3	II
IMO/IMDG	UN1203	Gasoline	3	II
IATA/ICAO	UN1203	Gasoline	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 302 Extremely Hazardous Substances and TPQs (in pounds)
This material contains the following chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372:

Component	TPQ	EPCRA RQ
Hydrogen Sulfide	500 lb	100 lb

CERCLA/SARA – Section 311/312 (Title III Hazard Categories)
Acute Health: Yes
Chronic Health: Yes
Fire Hazard: Yes
Pressure Hazard: Yes
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
Hydrogen Sulfide	1.0%
Benzene	0.1%

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
Benzene	Cancer Developmental Toxicant Male Reproductive Toxicant

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
D2A

National Chemical Inventories

Component	CAS Number	TSCA
Natural Gasoline	68425-31-0	Yes
Hydrogen Sulfide	7783-06-4	Yes
Benzene	71-43-2	Yes

Section 16: Other Information

Last Revision Date: 28/September/2010

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