Conoco Material Safety Data Sheet

MATERIAL IDENTIFICATION

NUMBER : GASC0066
NAME : Sour Condensate

CHEMICAL FAMILY : Petroleum Hydrocarbon
TRADE NAMES AND SYNONYMS :
Casinghead Gasoline
Natural Gasoline
0541

CAS NUMBER : Mixture; See Regulatory Information
NFPA RATING : Health: 1 Flammability: 3 Reactivity: 0
WHMIS CLASSIFICATION :
This is a WHMIS controlled material. See Regulatory Information.

MANUFACTURER/DISTRIBUTOR: Conoco, Inc.
P.O. Box 2197
Houston, TX 77252
GENERAL INFORMATION PHONE : 1-(713)293-5550
TRANSPORTATION EMERGENCY PHONE : 1-(800)424-9300
MEDICAL EMERGENCY PHONE : 1-(800)441-3637

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OSHA HAZARD DETERMINATION

Hazardous Ingredients	CAS Number	%
Hydrocarbons (Aromatic & Paraffinic)	Mixture	>50%
Benzene (wt.%)	71-43-2	0.1-1%
Hydrogen Sulfide	7783-06-4	1-10%

Hazardous Physical Properties:
Class IA Flammable Liquid - NFPA 30-1987.

The material is hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Refer to the Regulatory Information Section of this MSDS for federal and state regulatory information.

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PHYSICAL DATA

Boiling Point : 80-700 deg F
Vapor Pressure : 200-500 mm Hg at 68 deg F
Vapor Density : > 1 (Air = 1.0)
% Volatiles : Variable
Solubility in Water : Insoluble
Odor : Sulfur
Form : Liquid
Color : Dark
Specific Gravity : (H2O=1) 0.8

HAZARDOUS REACTIVITY

Instability : Stable.
Hazardous Decomposition Products: Carbon monoxide and oxides of sulfur may be formed.

Conditions to Avoid: Oxidizing materials, heat, flame.

Hazardous Polymerization: Will not occur.

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FIRE AND EXPLOSION DATA

Flash Point : -50 deg F
Method : PMCC
Flammable Limits in Air, % by Vol.
LEL : 1
UEL : 10

FIRE AND EXPLOSION HAZARDS

Class IA Flammable Liquid (NFPA).

EXTINGUISHING MEDIA

Dry Chemical. CO2.
Foam.

SPECIAL FIRE FIGHTING INSTRUCTIONS

Special Fire Fighting Procedures: Water may be ineffective to extinguish, but water should be used to keep fire-exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop a leak. Water spray may be used to flush spills away from areas of potential ignition.

Unusual Fire and Explosion Hazards: Highly Flammable. Products of combustion may contain carbon monoxide, carbon dioxide and other toxic materials. Do not enter enclosed or confined space without proper protective equipment including respiratory protection.

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HEALTH HAZARD INFORMATION

Primary Routes of Exposure/Entry: Skin, Inhalation.

Signs and Symptoms of Exposure/Medical Conditions Aggravated by Exposure:
A few studies have indicated that workers exposed many years to high concentrations of benzene have a slightly higher

(HEALTH HAZARD INFORMATION - CONTINUED)

incidence of leukemia. Benzene can also be toxic to the blood and blood-forming tissues.

Studies with mice or rats have shown that some petroleum distillates have caused either damage or tumors of the kidneys or tumors of the liver. However, kidney effects were not seen in similar studies involving guinea pigs, dogs or monkeys. Also, the significance of the liver tumors in rodents is highly speculative.

Mouse skin painting studies have shown that petroleum middle distillates (boiling range of 100-700 deg F; naphtha, jet fuel, diesel fuel, kerosene, etc.) can cause skin cancer when repeatedly applied and never washed from the animal's skin. The relative significance of this to human health is uncertain since the petroleum distillates were not washed from the skin and resulting skin effects (irritation, cell damage, etc.) may play a role in the tumorigenic response. A few studies have shown that washing the animal's skin with soap and water between treatments greatly reduces the carcinogenic effect of some petroleum oils.

The product contains petroleum hydrocarbons which may cause irritation to eyes, skin and lungs after prolonged or repeated exposure. Extreme exposure or aspiration into the lungs may cause pneumonia. Overexposure may cause weakness, headache, nausea, confusion, blurred vision, drowsiness and other nervous system effects; greater exposure may cause dizziness, slurred speech, flushed face, unconsciousness or convulsions.

Hydrogen sulfide can be irritating at low concentrations to the eyes, skin and lungs. At higher concentrations, loss of ability to smell hydrogen sulfide, respiratory paralysis and death may occur.

Carcinogenicity

The following components are listed by IARC, NTP, OSHA, or ACGIH as carcinogens. A 'P' indicates a Proposed Carcinogen.

Chemical	IAR	NTP	OSH	AC
Benzene (IARC - Category 1)		X	X	

DuPont controls the following chemicals as potential carcinogens : Benzene (IARC - Category 1) .

Exposure Limits for Sour Condensate

(HEALTH HAZARD INFORMATION - CONTINUED)

TLV ** (ACGIH) : None Established
PEL (OSHA) : None Established
Other : Exposure Limit for Petroleum Distillate
PEL: 400 ppm, 1600 mg/m3

Other Applicable Exposure Limits:

Exposure Limits for Benzene (wt.%)

AEL * (DuPont): 1 ppm - 8 & 12 Hr. TWA
5 ppm - 15 Min. TWA
TLV ** (ACGIH) : 10 ppm, 30 mg/m3 (A2)
PEL (OSHA) : 1 ppm - 8 Hr. TWA
5 ppm - (Short term exposure limit)
0.5 ppm - Action level

Exposure Limits for Hydrogen Sulfide

AEL * (DuPont): 10 ppm - 8 & 12 Hr. TWA
TLV ** (ACGIH) : 10 ppm, 14 mg/m3
STEL 15 ppm, 21 mg/m3
PEL (OSHA) : 10 ppm, 14 mg/m3
STEL 15 ppm, 21 mg/m3

* AEL is DuPont's Acceptable Exposure Limit.
** TLV is a registered trademark.

Safety Precautions

Do not breathe vapor or mist. Avoid contact with eyes, skin, or clothing.

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FIRST AID

SKIN CONTACT
In case of contact, immediately wash skin with soap and plenty of water. If irritation develops, consult a physician.

EYE CONTACT
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION
If swallowed, do not induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. Call a physician.

INHALATION: Because hydrogen sulfide can cause death, rescuers must wear positive pressure full facepiece, self-contained or supplied-air NIOSH approved respirators before attempting the rescue, if hydrogen sulfide is present. Remove victim to fresh air immediately. If breathing stops, being artificial resuscitation. Keep

(FIRST AID - CONTINUED)

victim warm and at rest. Seek medical attention.

NOTES TO PHYSICIAN
Gastric lavage by qualified medical personnel may be considered, depending on quantity of material ingested.

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PROTECTION INFORMATION

Generally Applicable Control Measures and Procedures

Ventilation: General mechanical ventilation normally adequate but use local exhaust where necessary to maintain exposures below acceptable limits.

Personal Protective Equipment

Respiratory Protection: Select appropriate NIOSH-approved respiratory protection where necessary to maintain exposure below acceptable limits in the Health Hazard Section. Proper respirator selection should be determined by adequately trained personnel and based on the contaminant(s), the degree of potential exposure and published respirator protection factors.

Protective Gloves: Should be worn when any potential exists for skin contact. NBR or neoprene recommended.

Eye Protection: Goggles or face shield for spray/mists or if splashing is probable.

Other Protective Equipment: Coveralls with long sleeves if splashing is probable. Launder contaminated clothing before reuse. Extremely contaminated leather shoes should be discarded.

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SPILL, LEAK AND DISPOSAL INFORMATION

Spill, Leak, or Release

NOTE: Review FIRE AND EXPLOSION HAZARDS and SAFETY PRECAUTIONS before proceeding with clean up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean up.
All sparks, flames and ignition sources must be restricted from the area. Contain spill immediately in smallest possible area. Recover as much of the product as possible by such methods as vacuuming, followed by recovering residual fluids by using absorbent materials. Nonrecoverable product, contaminated soil, debris and other materials should be placed in proper containers for ultimate disposal. Avoid washing, draining or directing material

(SPILL, LEAK AND DISPOSAL INFORMATION - CONTINUED)

storm or sanitary sewers.

Waotw Disposal

Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.
Recycle as much of the recoverable product as possible.

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SHIPPING INFORMATION

DOT

Proper Shipping Name	: Gasoline
Hazard Class	: Flammable liquid
UN/NA No.	: UN 1203
DOT Label(s)	: Flammable liquid
DOT Placard	: Flammable

IATA/IMO

Proper Shipping Name	: Natural gasoline
Hazard Class	: 3 (IMO 3.1)
UN No.	: UN 1257
IMO/ICAO Label	: Flammable liquid
Packaging Group	: II

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STORAGE CONDITIONS

Store in accordance with National Fire Protection Assn regulations.

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Acute: Yes
Chronic: Yes
Fire: Yes
Reactivity: No
Pressure: No

REGULATORY INFORMATION

FEDERAL REGULATIONS
CERCLA, 40 CFR 261 and 302
The material contains the following hazardous substance which, when released in quantities equal to or exceeding the Reportable Quantity, triggers National Response Center notification requirements.

Hazardous Substance	Reportable Quantity
Not Applicable	

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986, TITLE III - SECTIONS 302, 304, 311, 312, 313

(REGULATORY INFORMATION - CONTINUED)

SECTION 302/304 - Extremely Hazardous Substances, 40 CFR 355

The material contains extremely hazardous substances at greater than 1.0% concentration as listed below; it is possible that this material may contain other extremely hazardous substances at a lower concentration.

Extremely Hazardous Substances: Hydrogen Sulfide
Threshold Planning Quantity: 500 lbs of H2S
Reportable Quantity: 100 lbs of H2S
Concentration: 1-10%

SECTION 311/312 - MSDS and Chemical Inventory Reporting Requirements, 40 CFR 370
The material should be reported under the following EPA hazard categories:

x Immediate (Acute Health Hazard)
x Delayed (Chronic Health Hazard)
x Fire
Sudden Release of Pressure
Reactive
Not Applicable

Note: See the Hazard Determination Section for the concentration of any ingredients classified as hazardous by OSHA.

SECTION 313 - List of Toxic Chemicals, 40 CFR 372
The material contains the following chemical(s) at a level of 1.0% or greater (0.1% for carcinogens) on the list of Toxic Chemicals and is subject to toxic chemical release reporting requirements.

Toxic Chemical	CAS #	Approx. Concentration (Upper Bound)
Benzene	71-43-2	1%

TOXIC SUBSTANCES CONTROL ACT (TSCA), 40 CFR 710
The material is a mixture as defined by TSCA. The chemical ingredients in this material are in the Section 8(b) Chemical Substance Inventory and/or are otherwise in compliance with TSCA. In the case of ingredients obtained from other manufacturers, Conoco relies on the assurance of responsible third parties in providing this statement.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261, SUBPART C AND D
The material, when discarded or disposed of, is not specifically listed as a hazardous waste in Federal

(REGULATORY INFORMATION - CONTINUED)

regulations; however, it could be considered hazardous if it meets criteria for being toxic, corrosive, ignitable or reactive according to U.S. EPA definitions (40 CFR 261). Additionally, it could be designated as hazardous according to state regulations. This material could also become a hazardous waste if it is mixed with or comes in contact with a listed hazardous waste. If such contact or mixing occurs, check 40 CFR 261 to determine whether it is a hazardous waste. If it is a hazardous waste, regulations 40 CFR 262, 263, 264 and 268 may apply.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15, 40 CFR 116
The material contains the following ingredient(s) which is considered hazardous if spilled in navigable waters.

Ingredient	Reportable Quantity
Petroleum Hydrocarbon	Film or sheen upon or discoloration of the water surface or adjoining shoreline

HAZARDOUS MATERIALS TRANSPORTATION ACT, 49 CFR 172
The material contains the following ingredient(s) which is considered hazardous if spilled while being transported in commerce.

Ingredient	Reportable Quantity
Not Applicable	

FOREIGN REGULATION

CANADIAN HAZARDOUS PRODUCTS ACT (WHMIS)
The material is a WHMIS Controlled Product and a Canadian MSDS is available.

STATE REGULATIONS

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 ("PROPOSITION 65")
The material contains ingredient(s) known to the State of California to cause cancer, birth defects or other reproductive harm. Read and follow label directions and use care when handling or using all petroleum products.

Ingredient:
Benzene

PENNSYLVANIA WORKER AND COMMUNITY RIGHT TO KNOW ACT
To the best of our knowledge the material is not sold or produced in Pennsylvania. Please notify us at the telephone number noted below if the material results in Pennsylvania commerce.

The above data are based on tests, experience, and other information which Conoco believes reliable and are supplied for informational purposes only. However, some ingredients may have been purchased or obtained from third-party manufactures. In these instances, Conoco, in good faith, relies on information provided by those third parties. Since conditions of use are outside our control, CONOCO DISCLAIMS ANY LIABILITY FOR DAMAGE OR INJURY WHICH RESULTS FROM USE OF THE ABOVE DATA. NOTHING CONTAINED HEREIN SHALL CONSTITUTE A GUARANTEE, WARRANTY (INCLUDING WARRANTY OF MERCHANTABILITY) OR REPRESENTATION (INCLUDING FREEDOM FROM PATENT LIABILITY) BY CONOCO WITH RESPECT TO THE DATA, THE MATERIAL DESCRIBED, OR ITS USE FOR ANY SPECIFIC PURPOSE, EVEN IF THAT PURPOSE IS KNOWN TO CONOCO.

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Responsibility for MSDS : Env. & Occ. Health Services
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