

CONOCO
Material Safety Data Sheet

Page

MATERIAL IDENTIFICATION

CONDENSATE

MSDS NUMBER : GASC0065
Revision Date : 15-Apr-92
Date Printed : 15-Apr-92

MANUFACTURER/DISTRIBUTOR

Conoco, Inc.
P.O. Box 2197
Houston, TX 77252

PHONE NUMBERS

GENERAL INFORMATION : 1-(713)293-5550
TRANSPORT EMERGENCY : 1-(800)424-9300
MEDICAL EMERGENCY : 1-(800)441-3637

CHEMICAL FAMILY : Petroleum Hydrocarbon

TRADE NAMES / SYNONYMS

Casinghead Gasoline
Natural Gasoline
0202, 0230

CAS NUMBER : 64741-47-5
NFPA RATINGS : Health: 1 Flammability: 4 Reactivity: 0
NPCA-HMIS RATINGS : Health: 2 Flammability: 4 Reactivity: 0
Personal Protection rating to be supplied by
user depending on use conditions.

OSHA HAZARD DETERMINATION

<u>Hazardous Ingredients</u>	<u>CAS Number</u>	<u>%</u>
Condensate	64741-47-5	100
containing		
Hydrocarbons (Aromatic & Paraffinic)	MIXTURE	>70
* Toluene	108-88-3	<15
* Xylenes	1330-20-7	<12
* Benzene	71-43-2	0.1-5

* Regulated as a Toxic Chemical under Section 313 of
Title III of the Superfund Amendments and Reauthorization
Act of 1986 and 40 CFR part 372.

PHYSICAL DATA

Boiling Point : -20 to 600 deg F
Vapor Pressure : 200-500 mm Hg at 68 deg F
Vapor Density : >1 (Air = 1.0)
% Volatiles : Variable
Water Solubility : Insoluble
Odor : Gasoline
Form : Liquid
Color : Colorless
Specific Gravity : 0.6-0.8

HAZARDOUS REACTIVITY

Instability : Stable.
Incompatibility : Incompatible with oxidizing materials. Avoid heat, sparks, and flame.
Decomposition : Carbon monoxide may be formed from incomplete combustion.
Polymerization : Polymerization will not occur.

FIRE AND EXPLOSION DATA

Flash Point : As low as -50 F
Method : PMCC
Flammable Limits in Air, % by Volume
LEL : < 1
UEL : 10
Autoignition : As low as 450 F

FIRE AND EXPLOSION HAZARDS

Vapor forms explosive mixture with air. Vapors or gases may travel considerable distances to ignition source and flash back. Class IA Flammable Liquid (NFPA).

EXTINGUISHING MEDIA

Foam. Dry Chemical. CO2.

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

(FIRE AND EXPLOSION DATA - Continued)

respiratory protection.

HEALTH HAZARD INFORMATION

Acute Toxicity Data - None Available

Other Toxicity Data -

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

Animal studies with toluene have failed to demonstrate birth defects in rats and mice. However, toluene has been shown to cause delayed growth and extra ribs in the offspring of rats and mice at inhaled doses (266-399 ppm) that were nontoxic to the mother. Toluene has not been conclusively shown to cause adverse reproductive effects in humans.

One published study on xylene reports limited data suggesting high oral doses caused an increase in malignant tumors in rats. However, other more extensive animal studies have demonstrated no evidence of carcinogenicity. Developmental toxicity was observed but only at concentrations that were maternally toxic. Xylene does not have selective toxicity for the developing fetus.

Animal studies have shown that prolonged or repeated inhalation exposure to high concentrations of some petroleum distillates have caused liver tumors in mice and kidney damage/tumors in male rats. However, kidney effects were not seen in similar studies involving female rats, guinea pigs, dogs, or monkeys. Present studies indicate the kidney effects will only occur in male rats. Also, human studies do not indicate this peculiar sensitivity for kidney damage. The significance of liver tumors in exposed mice is highly speculative and not a good indicator for predicting a potential human carcinogenic hazard.

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

(HEALTH HAZARD INFORMATION - Continued)

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 lung damage or death. 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.

Remember that good hygienic practices can be helpful in preventing adverse health effects; for example, exposure to material and its fumes can be minimized by using protective clothing or devices while contaminated skin should be washed. Intermittent or occasional skin contact with the material is not expected to have serious health effects as long as good personal hygiene measures, such as those outlined in this material safety data sheet, are followed. The real risk for any chemical exposure is related to the degree of exposure.

CARCINOGENICITY

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

Material**IARC NTP OSHA ACGIH**

Benzene

X X X X

Du Pont controls the following materials as potential carcinogens :
Benzene.

APPLICABLE EXPOSURE LIMITS**Toluene**

AEL * (Du Pont): 100 ppm - 8 & 12 Hr. TWA
TLV (ACGIH) : 100 ppm, 377 mg/m³ - 8 Hr TWA
STEL 150 ppm, 565 mg/m³
See Notice of Intended Changes (1991-92)
50 ppm, 147 mg/m³ - 8 Hr TWA, skin
PEL (OSHA) : 100 ppm, 375 mg/m³ - 8 Hr TWA
STEL 150 ppm, 560 mg/m³

(HEALTH HAZARD INFORMATION - Continued)

Xylenes

AEL • (Du Pont): 100 ppm - 8 Hr. TWA
150 ppm - 15 Min. TWA
TLV (ACGIH) : 100 ppm, 434 mg/m³ - 8 Hr TWA
STEL 150 ppm, 651 mg/m³
PEL (OSHA) : 100 ppm, 435 mg/m³ - 8 Hr TWA
STEL 150 ppm, 655 mg/m³

Benzene

AEL • (Du Pont): 1 ppm - 8 & 12 Hr. TWA
5 ppm - 15 Min. TWA
TLV (ACGIH) : 10 ppm, A2; 32 mg/m³, A2 - 8 Hr TWA
See Notice of Intended Changes (1991-92)
0.1 ppm, 0.3 mg/m³ - 8 hr TWA, skin, A1
PEL (OSHA) : 1 ppm - 8 Hr. TWA
5 ppm - (Short term exposure limit)
0.5 ppm - Action level

* AEL is Du Pont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

SAFETY PRECAUTIONS

Avoid breathing vapors or mist. Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling. Wash clothing after use.

FIRST AID**INHALATION**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician

SKIN CONTACT

In case of contact, immediately wash skin with soap and water. Wash contaminated clothing before reuse. 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. Immediately give two glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

(FIRST AID - Continued)

NOTES TO PHYSICIAN

Activated charcoal slurry may be administered.
To prepare activated charcoal slurry, suspend 50 grams
activated charcoal in 400mL water and mix thoroughly.
Administer 5mL/kg, or 350mL for an average adult.

PROTECTION INFORMATION

GENERALLY APPLICABLE CONTROL MEASURES AND PRECAUTIONS

Keep away from heat, sparks and flames. Use of non-sparking and explosion-proof equipment may be necessary depending on type of operation.

Ventilation: Storage and use areas should be well ventilated. Use fans or blowers in enclosed areas.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: A NIOSH/MSHA-approved, air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known or any other circumstances where air purifying respirators may not provide adequate protection.

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 are recommended if splashing is probable. Launder contaminated clothing before reuse.

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.

Dike spill. Prevent liquid from entering sewers, waterways or low areas. Soak up with sawdust, sand, oil dry or other absorbent material. Shovel or sweep up.

(SPILL, LEAK AND DISPOSAL INFORMATION - Continued)

Remove source of heat, sparks, flame, impact, friction or electricity including internal combustion engines and power tools. If equipment is used for spill cleanup, it must be explosion proof and suitable for flammable liquid and vapor.

NOTE: Vapors released from the spill may create an explosive atmosphere.

WASTE DISPOSAL

Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system.

By itself, the liquid is expected to be a RCRA hazardous waste.

SHIPPING INFORMATION
-----**DOT**

Proper Shipping Name : Gasoline
Hazard Class : Flammable liquid
UN/NA No. : UN 1203
DOT Labels(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

TDG

Proper Shipping Name : Petroleum crude oil

TDG Class : 3.1
PIN No. : UN 1267
TDG Label : Flammable liquid
TDG Placard : Flammable

STORAGE CONDITIONS

Store in accordance with National Fire Protection Assn regulations.

TITLE III HAZARD CLASSIFICATIONS

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

REGULATORY INFORMATION
-----**OSHA HAZARD DETERMINATION**

The material is hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

CLEAN AIR ACT, 40 CFR 50, SECTIONS 112, 114

The material is not known to contain a Hazardous Air Pollutant.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, & LIABILITY ACT (CERCLA/SUPERFUND), 40 CFR 302
Not Applicable

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986, TITLE III (SARA) - SECTION 302/304 - Extremely Hazardous Substances, 40 CFR 355

The material is not known to contain extremely hazardous substances at greater than 1.0% concentration; however, it is possible that this material may contain extremely hazardous substances at a lower concentration so that a large enough spill could warrant an Emergency Release

TOXIC SUBSTANCES CONTROL ACT (TSCA), 40 CFR 710

This material is in the TSCA Inventory of Chemical Substances (40 CFR 710) and/or is otherwise in compliance with TSCA.

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 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). This material could also become a hazardous waste if it is mixed with or comes in contact with a listed hazardous waste. If it is a hazardous waste, regulations 40 CFR 262-266 and 268 may apply.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 116.4A, Section 311

The material contains the following ingredient(s) which is considered hazardous if spilled in navigable waters.

(REGULATORY INFORMATION - Continued)

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

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
Toluene

PENNSYLVANIA WORKER AND COMMUNITY RIGHT TO KNOW ACT
The material contains the following ingredient(s) found
on the Pennsylvania Worker and Community Right-to-Know
Act Hazardous Substance List:

Ingredient : Natural Gas Condensate
CAS Registry Number : 64741-47-5
Category : Hazardous Substance

Ingredient : Benzene
CAS Registry Number : 71-43-2
Category : Environmental Hazard
Special Hazardous Substance

Ingredient : Methylbenzene (Toluene)
CAS Registry Number : 108-88-3
Category : Environmental Hazard

Ingredient : Dimethylbenzene (Xylene)
CAS Registry Number : 1330-20-7
Category : Environmental Hazard

Nonhazardous ingredient(s) information is withheld as
trade secret in accordance with Section 11 of the Act.

Foreign Regulations

CANADIAN HAZARDOUS PRODUCT ACT (WHMIS)

The material is a WHMIS Controlled Product.

Class B Division 2 : Flammable Liquid.

Class D Division 2A : Very Toxic Material.
Chronic Toxic Effects.
Carcinogen.

Class D Division 2B : Toxic Material.
Skin or Eye Irritant.

(REGULATORY INFORMATION - Continued)

Emergency Phone Number: 1-613-348-3616

ADDITIONAL INFORMATION AND REFERENCES
-----Product Use: Blended for Motor Fuel
Chemical Plant Feedstock-----

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.

Responsibility for MSDS : MSDS Administrator, SHEA
Conoco Inc.
PO Box 2197
Houston, TX 77252
713-293-5550

End of MSDS