



Conoco Inc.

GASC0065



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CONDENSATE

MATERIAL IDENTIFICATION

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 and 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

Hazardous Ingredients	CAS Number	Percent
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.

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PHYSICAL DATA

Boiling Point	-20 to 600°F
Vapor Pressure	200-500 mm Hg at 68°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 respiratory protection.

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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.

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.

Animal Studies:

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

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HEALTH HAZARD INFORMATION (continued)

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 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.

Carcinogenicity

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

Material

Benzene

IARC NTP OSHA ACGIH

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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/m ³ - 8 Hr TWA
	STEL 150 ppm, 565 mg/m ³
	See Notice of Intended Changes (1991-92)
	50 ppm, 147 mg/m ³ - 8 Hr TWA, skin
PEL (OSHA)	100 ppm, 375 mg/m ³ - 8 Hr TWA
	STEL 150 ppm, 560 mg/m ³

Xylenes

AEL * (Du Pont)	100 ppm - 8 Hr. TWA
	150 ppm - 15 Min. TWA
TLV (ACGIH)	100 ppm, 434 mg/m ³ - 8 Hr TWA
	STEL 150 ppm, 651 mg/m ³
PEL (OSHA)	100 ppm, 435 mg/m ³ - 8 Hr TWA
	STEL 150 ppm, 655 mg/m ³

Benzene

AEL * (Du Pont)	1 ppm - 8 & 12 Hr. TWA
	5 ppm - 15 Min. TWA
TLV (ACGIH)	10 ppm, A2; 32 mg/m ³ , A2 - 8 Hr TWA
	See Notice of Intended Changes (1991-92)
	0.1 ppm, 0.3 mg/m ³ - 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

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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.
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

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SPILL, LEAK AND DISPOSAL INFORMATION (continued)

Shovel or sweep up.

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

Above DOT description allowed prior to 10/01/93.

INTERNATIONAL HM-181 (EFFECTIVE 10/01/93):

Proper Shipping Name : Natural Gasoline
Hazard Class : 3
UN/NA Number : UN 1257
Packing Group : I or II
Labels : Flammable Liquid
Placards : 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

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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 contains the following Hazardous Air

Pollutants : Toluene
Xylenes
Benzene

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.

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 and therefore reportable to the National Response Center (1-800-424-8802).

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.

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REGULATORY INFORMATION (continued)

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	Category
Natural Gas Condensate	Hazardous Substance
Benzene	Environmental Hazard
	Special Hazardous Substance
Methylbenzene (Toluene)	Environmental Hazard
Dimethylbenzene (Xylene)	Environmental Hazard

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.

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 manufacturers. 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