



Conoco Inc.

RESC0001



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LOW SULFUR SLURRY OIL

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 Hydrocarbons		
Trade Names and Synonyms	0585		
CAS Number	DP734-51-4		
NFPA Ratings	Health:	0	
	Flammability:	1	
	Reactivity:	0	
NPCA-HMIS Ratings	Health:	2	
	Flammability:	1	
	Reactivity:	0	
	Personal Protection rating to be supplied by user depending on use conditions.		

OSHA HAZARD DETERMINATION

Hazardous Ingredients	CAS Number	Percent
Polycyclic Aromatic Hydrocarbons (PAHs), e.g., benzo(a)pyrene		<10
Carbazoles		<10
Hydrogen Sulfide	7783-06-4	<0.1

Hydrogen sulfide is not normally present in the material, but if the material is heated to high temperatures, hydrogen sulfide may exist in head space of storage vessel.

Other components in this material are not known to be hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

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PHYSICAL DATA

Vapor Pressure	(psi) Nil at 100 deg F
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Vapor Density	Not Applicable
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Water Solubility	Nil
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Odor	Aromatic
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Form	Viscous liquid
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Color	Black
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API Gravity	: -4 to +4
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Distillation Range	: 500 to 1100 deg F
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HAZARDOUS REACTIVITY

Instability	Stable.
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Incompatibility	Incompatible with strong oxidizers. Avoid heat and flame.
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Decomposition	Incomplete combustion may produce carbon monoxide.
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Polymerization	Polymerization will not occur.
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FIRE AND EXPLOSION DATA

Flash Point	>200°F
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Fire and Explosion Hazards	Class IIIB Combustible Liquid (NFPA).
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Extinguishing Media	Water Spray. Foam. Dry Chemical. CO2.
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Special Fire Fighting Instructions	Cool tank/container with water spray.
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Water or foam may cause frothing. Water spray may be used to flush spills away from exposures.

UNUSUAL FIRE AND EXPLOSION HAZARDS

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.

HEALTH HAZARD INFORMATION

Primary Routes of Exposure/Entry: Skin, Inhalation. *

Signs and Symptoms of Exposure/Medical Conditions

Aggravated by Exposure:

Mouse skin painting studies have shown that nonsolvent-refined petroleum distillates having a distillation end-point above 700 deg F, and which are similar to ingredients in this product, caused skin tumors. The product may contain polynuclear aromatic hydrocarbons which have caused cancer involving skin and internal organs

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HEALTH HAZARD INFORMATION (continued)

in laboratory animals. This animal data should be interpreted cautiously since these studies involved repeated exposure of shaved skin which was never washed free of test material; the resulting skin effects (irritation, cell damage, etc.) may play a role in the tumorigenic response. Also, limited studies of carcinogenic oils have shown that washing the animals' skin with soap and water between applications greatly reduces tumor formation. These studies demonstrate the effectiveness of cleansing the skin after contact. Note that the OSHA exposure limit for coal tar pitch volatiles is 0.2 mg/m³. The product may produce a phototoxic reaction when contaminated skin is exposed to sunlight. The effect is similar in appearance to an exaggerated sunburn and is temporary in duration. Also note that carbazoles cause extensive liver damage.

This product may be a source of hydrogen sulfide if exposed to extremely high temperatures. If hydrogen sulfide is present, low concentrations are irritating to the eyes, skin, and respiratory tract. At higher concentrations, loss of ability to smell hydrogen sulfide, respiratory paralysis, and death may occur.

Concerning the above information, remember that good hygienic practices are helpful in preventing adverse health effects. Exposure can be minimized by using protective clothing or devices and contaminated skin should be washed. The possibility of thermal burns from the material acts as a deterrent against skin, eye, or inhalation exposure. 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.

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
LOW SULFUR SLURRY OIL				X

Applicable Exposure Limits

Hydrogen Sulfide

AEL* (Du Pont)	10 ppm - 8 & 12 Hr. TWA
TLV (ACGIH)	10 ppm, 14 mg/m ³ - 8 Hr TWA
	STEL 15 ppm, 21 mg/m ³
PEL (OSHA)	10 ppm, 14 mg/m ³ - 8 Hr TWA
	STEL 15 ppm, 21 mg/m ³

* 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

Do not breathe vapor 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. If hydrogen sulfide could be present, review the Personal Protective Equipment Section.
Skin Contact	In case of contact, immediately wash skin with soap and water. Wash contaminated clothing before reuse.
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

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 exposures below the acceptable limits in the Health Hazard Section. Proper respiratory selection should be determined by adequately trained personnel and based on the contaminant(s), the degree of potential exposure and published respirator protection factors.

In situations where the material is exposed to high temperatures for extended periods of time, hydrogen sulfide may build up in unventilated storage vessel headspaces. NIOSH-approved full face air-supplied respirator or self-contained breathing equipment should be used when first opening these storage vessels.

PROTECTIVE GLOVES: NBR or neoprene recommended. Use insulated gloves where the material is being handled hot.

EYE PROTECTION: Face shield is recommended where material is handled hot and splashing may occur.

OTHER PRECAUTIONS: Sufficient protective clothing to minimize skin exposure. Complete protective clothing if material is being handled hot. Avoid prolonged skin contact by practicing good personal hygiene and laundering contaminated clothing.

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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. Dike spill. Prevent liquid from entering sewers, waterways or low areas. Recover free liquid for reuse or reclamation. Soak up with sawdust, sand, oil dry or other absorbent material.

Waste Disposal

Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Recover nonusable free liquid and dispose of in an approved and permitted incinerator. Do not flush to surface water or sanitary sewer system.

Nonrecoverable material, contaminated soil, and debris should be placed in proper containers for ultimate disposal.

SHIPPING INFORMATION

DOT

Proper Shipping Name Not Regulated.

IATA/IMO

Proper Shipping Name Not restricted.

STORAGE CONDITIONS

Store in accordance with National Fire Protection Assn regulations.

TITLE III HAZARD CLASSIFICATIONS

Acute	Yes
Chronic	Yes
Fire	No
Reactivity	No
Pressure	No

REGULATORY INFORMATION

OSHA HAZARD DETERMINATION

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

EPA DETERMINATIONS

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, & LIABILITY ACT (CERCLA/Superfund), 40 CFR 302
Not applicable; this material is covered by the CERCLA petroleum exclusion. Releases are not reportable.

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REGULATORY INFORMATION (continued)

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986, TITLE III (SARA) - SECTIONS 302, 304, 313

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 Report under Section 304.

SECTION 313 - List of Toxic Chemicals, 40 CFR 372

The material is not known to contain any chemicals at a level of 1.0% or greater (.01% for carcinogens) on the list of Toxic Chemicals and subject to release reporting requirements.

TOXIC SUBSTANCES CONTROL ACT (TSCA), 40 CFR 710

This material is in the TSCA Inventory of Chemical Substances and/or is otherwise in compliance with TSCA.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261, SUBPARTS 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.

Ingredient	: Petroleum Hydrocarbons
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 the following 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:
Polynuclear Aromatic Hydrocarbons, e.g.,
benzo(a)pyrene

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 Conoco at the telephone number noted below if the material results in Pennsylvania commerce.

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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:

Safety, Health, & Env. Affairs
Conoco Inc.
PO Box 2197
Houston, TX 77252
713/293-5550

End of MSDS

