



Reader

Conoco Chemicals Company
A Division of Conoco Inc.
5 Greenway Plaza East
P.O. Box 2197
Houston, TX 77001

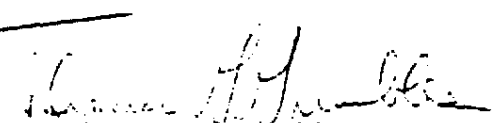
August 31, 1981

Mr. Leslie Lee
Exxon Chemicals
P.O. Box 241
Baton, Rouge 70805

Dear Leslie:

Per your request, enclosed is a Material Safety Data Sheet for Conoco Chemicals Piperylene Concentrate. Please feel free to contact me if you have further questions.

Sincerely,


Thomas G. Grumbles, Director
Industrial Hygiene

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Enclosure

CCR 000001892



Conoco Chemicals
5 Greenway Plaza East
P.O. Box 2197
Houston, Texas 77001

MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION	
MANUFACTURER'S NAME	Conoco Chemicals Company
REGULAR TELEPHONE NO.	713/965-5010
EMERGENCY TELEPHONE NO.	318/491-5070
ADDRESS	Chocolate Bayou Operations, P.O. Box 2917, Alvin, TX 77511
TRADE NAME	Piperylene Concentrate
SYNONYMS	Mixed C ₅ Hydrocarbons

II. HAZARDOUS INGREDIENTS		
MATERIAL OR COMPONENT	%	HAZARD DATA
Cis & Trans piperylene	≥ 30	
Isoprene	≤ 7	
C ₅ dienedimers	15	
Benzene	≤ 2	

III. PHYSICAL DATA			
BOILING POINT (°F.)	106	SPECIFIC GRAVITY (H ₂ O = 1)	0.70
VAPOR PRESURE (mm Hg.)	12.5 psia @ 100°F	PERCENT VOLATILE BY VOLUME (%)	100%
VAPOR DENSITY (AIR = 1)	2.4	EVAPORATION RATE (_____ = 1)	
SOLUBILITY IN WATER	negligible	MELTING POINT	
APPEARANCE AND ODOR	Colorless liquid - strong sweet odor		

IV. FIRE AND EXPLOSION DATA				
FLASH POINT (TEST METHOD)	Below 0°F (TCC)		AUTOIGNITION TEMPERATURE	
FLAMMABLE LIMITS IN AIR. % BY VOL.	LOWER	1.5	UPPER	7.5
EXTINGUISHING MEDIA	CO ₂ , dry chemical, water fog			
SPECIAL FIRE FIGHTING PROCEDURES	Cool surface of exposed tanks with water spray. Self-contained breathing apparatus should be worn. Do not attempt to extinguish flames due to possibility of explosion and reignition.			
UNUSUAL FIRE AND EXPLOSION DATA	Hazardous flammable liquid. Contact with oxidizers may cause fire and explosion. Exposure to air may form peroxides.			

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FIRST AID

- EYES:** Flush with copious amounts of water for at least 15 minutes. Seek medical aid.
- SKIN:** Wash with non-abrasive soap. Flush with copious amounts of water.
- INHALATION:** Remove from exposure. If breathing has stopped, administer artificial respiration or oxygen and cardio-pulmonary resuscitation if indicated. Seek medical aid.
- INGESTION:** Do not induce vomiting. Administer 2-4 oz. of vegetable oil or olive oil and seek medical aid.

NATURE OF HAZARD

- EYES:** Irritation may result with exposure to high vapor concentrations or liquid.
- SKIN:** Repeated contact may cause dermatitis. This material may be absorbed through the skin in toxic amounts.
- INHALATION:** Nose, throat and upper respiratory tract irritation may occur. Chronic exposure can lead to CNS depression and systemic toxicity.
- INGESTION:** Systemic toxicity may occur. If material is aspirated into the lungs, pneumonia may occur.

EFFECTS OF OVEREXPOSURE:

- ACUTE OVEREXPOSURE:** Irritation eyes, nose, throat and upper respiratory tract. Dizziness and CNS depression.
- CHRONIC OVEREXPOSURE:** Systemic toxicity may result.

THRESHOLD LIMIT VALUE (TLV)

None established: 1,000 ppm TLV is recommended.

TOXICITY DATA

SKIN CONTACT: Rabbit Dermal LD50: >7,940 mg/kg
Skin irritation score of 0 (maximum of 8)

EYE CONTACT: Eye irritation score of 14 (maximum of 110)

INHALATION: This material contains small amounts of benzene which is a suspect leukemogen.

INGESTION: Rat oral LD50: 10,400 mg/kg

SPECIAL PRECAUTIONS:

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CONDITIONS CONTRIBUTING TO INSTABILITY

Presence of heat, oxygen, water, acetylide-forming metals.

INCOMPATIBILITY Air; oxidizing agents, water, caustics, amines, halogenated compounds, alcohols, glycol ethers, phenols, ammonia, halogens, ether, acid anhydrides.

HAZARDOUS DECOMPOSITION PRODUCTS

May form peroxides and unstable polymers upon explosion.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION

All sources of heat, sparks, and exposure to air.

VII

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Eliminate all ignition sources. Evacuate area. If possible eliminate leak source. Prevent liquid from entering sewers or low areas. Increase ventilation if indicated.

NEUTRALIZING CHEMICALS

WASTE DISPOSAL METHOD

Vapors should be vented to a burning flare. If vapor must be vented to atmosphere insure dissipation of gas below it's LEL. Liquids should be incinerated.

VIII

SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS

This product should be used only with adequate ventilation. Mechanical ventilation is recommended.

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY (SPECIFY IN DETAIL):

Organic vapor cannister or air-supplied respirators.

EYE: Chemical goggles and face shield should be worn when handling this product.

GLOVES: Impervious gloves should be worn. Butyl rubber and polyvinyl alcohol are suitable materials.

OTHER CLOTHING AND EQUIPMENT:

Other impervious clothing may be required if contact is possible.

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SPECIAL PRECAUTIONS

IMCO HAZARD CLASS AND NUMBER 3.1	US DOT CLASSIFICATION Flammable Liquid
UN NUMBER 1993	EEC DANGEROUS SUBSTANCE CLASSIFICATION
ADR CLASS NUMBER	EEC SPECIAL RISKS AND SAFETY ADVICE
CAS NUMBER	

TRANSPORTATION AND STORAGE

USUAL SHIPPING CONTAINERS	ELECTROSTATIC ACCUMULATION HAZARD
	STORAGE/TRANSPORT PRESSURE
STORAGE TRANSPORT TEMPERATURE	LOADING/UNLOADING TEMPERATURE
	VISCOSITY AT LOADING/UNLOADING TEMPERATURE

HANDLING AND STORAGE MATERIALS AND COATINGS

SUITABLE	UNSUITABLE
Steel	

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