



Jim Reader

Interoffice Communication

To ~~Distribution~~

From Tom Grumbles

Date November 2, 1982

Subject MATERIAL SAFETY DATA SHEETS

Enclosed is a draft MSDS for CA-514 and a draft MSDS for Cresylic Acids in general. CA-514 is a high-volume blend that warrants a single sheet. However, after discussions with several of you I feel the remaining blends can be handled with a single sheet. (An MSDS has already been prepared for CA-510.)

Please review these sheets and return comments to me by November 17.

Tom / ajo

Thomas G. Grumbles

ajo

Enclosure

Distribution:

Bill Broddle
Hank Pitera
George Haberman
Chuck Muth
Dr. Drumwright
Bill Groves
Joe Ledvina
Michele Malloy
Susan Litzau

UEV-274732



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

MATERIAL SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

MANUFACTURER'S NAME	Conoco Chemicals Company		
ADDRESS	191 Doremus Avenue, Newark, NJ		
TRADE NAME	Conoco CA- 514		
SYNONYMS	Cresylic Acid		
REGULAR TELEPHONE NO.	(201) 344-3800	EMERGENCY TELEPHONE NO.	(318) 491-5142

2. HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	%	HAZARD DATA
2/4, 2/3, 2/5 Xylenols and Trimethylphenols	≤28	
2,6 Xylenol	≤37	
o-Cresol	≤36	

3. PHYSICAL DATA

BOILING POINT (°F)	376-441	SPECIFIC GRAVITY(H ₂ O = 1)	1.028
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR = 1)		EVAPORATION RATE (Butyl Acetate = 1)	17
SOLUBILITY IN WATER	Trace	MELTING POINT	7 °F
APPEARANCE AND ODOR	Sweet Tarry Odor; Liquid		

4. FIRE AND EXPLOSION DATA

FLASH POINT (TEST METHOD)	210 °F PM	AUTOIGNITION TEMPERATURE	
FLAMMABLE LIMITS IN AIR. % BY VOL	LOWER		UPPER
EXTINGUISHING MEDIA	Water (fog or spray), foam, dry chemical, or CO ₂ .		
SPECIAL FIRE FIGHTING PROCEDURES	This product is combustible. Wear self-contained breathing apparatus and full protective clothing. Cool tank with water if exposed to fire.		
UNUSUAL FIRE AND EXPLOSION HAZARD	Emits toxic fumes when heated.		

5. HEALTH HAZARD INFORMATION

FIRST AID

- EYES:** Immediately begin flushing with large amounts of water and continue at least for 15 minutes while transporting for emergency medical attention.
- SKIN:** Remove contaminated clothing. Immediately flush with large amounts of water, then wash affected areas with soap and water. **Isopropanol** can be used to further remove phenols. Seek medical attention as soon as possible.
- INHALATION:** Remove from exposure. Administer O₂ by nasal cannulae if available. Administer artificial respiration if breathing has stopped. Seek immediate medical attention.
- INGESTION:** Drink large amounts of water or weak sodium bicarbonate solution. **Do not induce vomiting.** If spontaneous vomiting occurs, precautions should be taken to avoid aspiration. Seek immediate medical attention.

NATURE OF HAZARD

- EYES:** Causes severe burns.
- SKIN:** Causes severe burns. Readily absorbed through the skin resulting in systemic toxicity. Skin exposures can be fatal.
- INHALATION:** Corrosive. Causes burning of mouth and throat, abdominal pain, nausea, and vomiting.
- INGESTION:** Corrosive. Causes burning of mouth and throat, abdominal pain, nausea, and vomiting. CNS depression may occur.

EFFECTS OF OVEREXPOSURE:

- ACUTE OVEREXPOSURE:** Local skin burns.
- CHRONIC OVEREXPOSURE:** Dermatitis and chronic poisoning affecting the central nervous system, liver, and kidney.

THRESHOLD LIMIT VALUE (TLV)

None established for this specific compound.

Recommended: ACGIH 1981 TLV for cresol (and isomers) 5.0 ppm (22 mg/m³) 8-hour, time-weighted average (skin).

TOXICITY DATA

- SKIN CONTACT:** This specific product has not been tested for its toxic properties. However, data on a similar product, plus literature data on individual constituents, indicate moderate acute oral and dermal toxicity and severe-corrosive contact irritation.
- EYE CONTACT:** See above.
- INHALATION:** See above.
- INGESTION:** See above.

SPECIAL PRECAUTIONS: All skin contact should be avoided. Speed in removing cresylics after contact is important.

UEV-274734

6. REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY

Not applicable.

INCOMPATIBILITY

Alkali metals.

HAZARDOUS DECOMPOSITION PRODUCTS

Not applicable.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION

Should not occur.

7. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Ventilate area. Sawdust, vermiculite, or sand may be used to absorb the spill. Pick up mechanically. Use personal protective equipment as appropriate.

NEUTRALIZING CHEMICALS

2 to 5 percent solution of sodium hydroxide.

WASTE DISPOSAL METHOD

Biological oxidation landfill or incineration according to established federal procedures.

8. SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS

Ensure that ventilation is adequate to maintain concentration in air less than 5 ppm.

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY (SPECIFY IN DETAIL):

Full face organic vapor cartridge or supplied air for high concentrations.

EYE:

Chemical safety goggles or face shield with goggles.

GLOVES:

Use rubber gloves to prevent skin contact.

OTHER CLOTHING AND EQUIPMENT:

Aprons, boots, etc. should be used where needed to prevent skin contact. Full slicker suit may be required where exposure is likely.

9. SPECIAL PRECAUTIONS

HAZARD CLASSIFICATION INFORMATION

IMCO HAZARD CLASS AND NUMBER Class 8.0	US DOT CLASSIFICATION DOT: Corrosive
UN NUMBER 1760	EEC DANGEROUS SUBSTANCE CLASSIFICATION
ADR CLASS NUMBER	EEC SPECIAL RISKS AND SAFETY ADVICE
CAS NUMBER 1300-71-6 Xylenols 95-48-7 0-cresol	HAZARD WASTE NO. U054

TRANSPORTATION AND STORAGE

USUAL SHIPPING CONTAINERS Tank Cars, Tank Trucks, Drums	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
Stainless Steel Glass Lined Heresite Lined Carbon Steel—for short periods if kept dry.	Brass and Copper—cause rapid discoloration.

THE ABOVE DATA IS BASED ON TESTS AND EXPERIENCE WHICH CONOCO BELIEVES RELIABLE AND ARE SUPPLIED FOR INFORMATIONAL PURPOSES ONLY. CONOCO DISCLAIMS ANY LIABILITY FOR DAMAGE OR INJURY WHICH RESULTS FROM THE USE OF THE ABOVE DATA AND NOTHING CONTAINED THEREIN SHALL CONSTITUTE A GUARANTEE, WARRANTY (INCLUDING WARRANTY OF MERCHANTABILITY) OR REPRESENTATION (INCLUDING FREEDOM FROM PATENT LIABILITY) BY CONOCO WITH RESPECT TO THE DATA, THE PRODUCT DESCRIBED, OR THEIR USE FOR ANY SPECIFIC PURPOSE, EVEN IF THAT PURPOSE IS KNOWN TO CONOCO.

UEV-274736



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

MATERIAL SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

MANUFACTURER'S NAME	Conoco Chemicals Company		
ADDRESS	191 Doremus Avenue, Newark, NJ		
TRADE NAME	Conoco Cresylic Acid		
SYNONYMS	Cresylic Acid		
REGULAR TELEPHONE NO.	(201) 344-3800	EMERGENCY TELEPHONE NO.	(318) 491-5142

2. HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	%	HAZARD DATA
This product is a mixture of phenol, cresol, xylene isomers, and tri-methyl phenols		

3. PHYSICAL DATA

BOILING POINT (°F)	360°F-455°F	SPECIFIC GRAVITY (H ₂ O = 1)	1.01-1.04
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR = 1)		EVAPORATION RATE (Butyl Acetate = 1)	17
SOLUBILITY IN WATER	Trace	MELTING POINT	
APPEARANCE AND ODOR	Sweet Tarry Odor; Liquid		

4. FIRE AND EXPLOSION DATA

FLASH POINT (TEST METHOD)	≥ 172°F PM	AUTOIGNITION TEMPERATURE	
FLAMMABLE LIMITS IN AIR, % BY VOL	LOWER		UPPER
EXTINGUISHING MEDIA	Water (fog or spray), foam, dry chemical, or CO ₂ .		
SPECIAL FIRE FIGHTING PROCEDURES	This product is combustible. Wear self-contained breathing apparatus and full protective clothing. Cool tank with water if exposed to fire.		
UNUSUAL FIRE AND EXPLOSION HAZARD	Emits toxic fumes when heated.		

VEU-274737

5. HEALTH HAZARD INFORMATION

FIRST AID

- EYES:** Immediately begin flushing with large amounts of water and continue at least for 15 minutes while transporting for emergency medical attention.
- SKIN:** Remove contaminated clothing. Immediately flush with large amounts of water, then wash affected areas with soap and water. **Isopropanol** can be used to further remove phenols. Seek medical attention as soon as possible.
- INHALATION:** Remove from exposure. Administer O₂ by nasal cannulae if available. Administer artificial respiration if breathing has stopped. Seek immediate medical attention.
- INGESTION:** Drink large amounts of water or weak sodium bicarbonate solution. **Do not induce vomiting.** If spontaneous vomiting occurs, precautions should be taken to avoid aspiration. Seek immediate medical attention.

NATURE OF HAZARD

- EYES:** Causes severe burns.
- SKIN:** Causes severe burns. Readily absorbed through the skin resulting in systemic toxicity. Skin exposures can be fatal.
- INHALATION:** Corrosive. Causes burning of mouth and throat, abdominal pain, nausea, and vomiting.
- INGESTION:** Corrosive. Causes burning of mouth and throat, abdominal pain, nausea, and vomiting. CNS depression may occur.

EFFECTS OF OVEREXPOSURE:

- ACUTE OVEREXPOSURE:** Local skin burns.
- CHRONIC OVEREXPOSURE:** Dermatitis and chronic poisoning affecting the central nervous system, liver, and kidney.

THRESHOLD LIMIT VALUE (TLV)

None established for this specific compound.

Recommended: ACGIH 1981 TLV for cresol (and isomers) 5.0 ppm (22 mg/m³) 8-hour, time-weighted average (skin).

TOXICITY DATA

- SKIN CONTACT:** This specific product has not been tested for its toxic properties. However, data on a similar product, plus literature data on individual constituents, indicate moderate acute oral and dermal toxicity and severe-corrosive contact irritation.
- EYE CONTACT:** See above.
- INHALATION:** See above.
- INGESTION:** See above.

SPECIAL PRECAUTIONS: All skin contact should be avoided. Speed in removing cresylics after contact is important.

6. REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY

Not applicable.

INCOMPATIBILITY

Alkali metals.

HAZARDOUS DECOMPOSITION PRODUCTS

Not applicable.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION

Should not occur.

7. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Ventilate area. Sawdust, vermiculite, or sand may be used to absorb the spill. Pick up mechanically. Use personal protective equipment as appropriate.

NEUTRALIZING CHEMICALS

2 to 5 percent solution of sodium hydroxide.

WASTE DISPOSAL METHOD

Biological oxidation landfill or incineration according to established federal procedures.

8. SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS

Ensure that ventilation is adequate to maintain concentration in air less than 5 ppm.

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY (SPECIFY IN DETAIL):

Full face organic vapor cartridge or supplied air for high concentrations.

EYE:

Chemical safety goggles or face shield with goggles.

GLOVES:

Use rubber gloves to prevent skin contact.

OTHER CLOTHING AND EQUIPMENT:

Aprons, boots, etc. should be used where needed to prevent skin contact. Full slicker suit may be required where exposure is likely.

9. SPECIAL PRECAUTIONS

HAZARD CLASSIFICATION INFORMATION

IMCO HAZARD CLASS AND NUMBER Class 8.0	US DOT CLASSIFICATION DOT: Corrosive
UN NUMBER 1760	EEC DANGEROUS SUBSTANCE CLASSIFICATION
ADR CLASS NUMBER	EEC SPECIAL RISKS AND SAFETY ADVICE
CAS NUMBER 1300-71-6 Xylenols 108-95-2 Phenols 1319-77-3 cresols 26998-80-1 trimethyl phenols	HAZARD WASTE NO. U054

TRANSPORTATION AND STORAGE

USUAL SHIPPING CONTAINERS Tank Cars, Tank Trucks, Drums	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
Stainless Steel Glass Lined Heresite Lined Carbon Steel—for short periods if kept dry.	Brass and Copper—cause rapid discoloration.

THE ABOVE DATA IS BASED ON TESTS AND EXPERIENCE WHICH CONOCO BELIEVES RELIABLE AND ARE SUPPLIED FOR INFORMATIONAL PURPOSES ONLY. CONOCO DISCLAIMS ANY LIABILITY FOR DAMAGE OR INJURY WHICH RESULTS FROM THE USE OF THE ABOVE DATA AND NOTHING CONTAINED THEREIN SHALL CONSTITUTE A GUARANTEE, WARRANTY (INCLUDING WARRANTY OF MERCHANTABILITY) OR REPRESENTATION (INCLUDING FREEDOM FROM PATENT LIABILITY) BY CONOCO WITH RESPECT TO THE DATA, THE PRODUCT DESCRIBED, OR THEIR USE FOR ANY SPECIFIC PURPOSE, EVEN IF THAT PURPOSE IS KNOWN TO CONOCO.

VEV-274740