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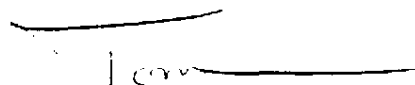
## Interoffice Communication

To Distribution  
From Tom Grumbles  
Date December 22, 1981  
Subject MATERIAL SAFETY DATA SHEETS

Enclosed are the first drafts of MSDS's for VCM EDC, EDC Tars, and VCM Light Ends. Please review the appropriate sections as indicated below and return your comments/input to me by January 20.

We have not had MSDS's for the VCM by-products in the past and there are quite a few blanks on these sheets, particularly in Section 3, and Section 9. Your input is certainly needed in these areas.

Thank you in advance for your cooperation.



Thomas G. Grumbles

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### Distribution:

|                |                                              |
|----------------|----------------------------------------------|
| Steve Ashby    | - Section 4, Section 5, First Aid, Section 8 |
| Dr. Drumwright | - Section 5                                  |
| Bill Broddle   | - Section 5                                  |
| Bill Groves    | - Section 6,7,9                              |
| Joe Ledvina    | - Section 7                                  |
| Gary Horton    | - Section 3                                  |

CCR 000001592





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               | P.O. Box 605, Westlake, LA 70669 |                         |              |
| TRADE NAME            | Ethylene Dichloride              |                         |              |
| SYNONYMS              | 1,2 Dichloroethene, EDC          |                         |              |
| REGULAR TELEPHONE NO. | 318/491-5039                     | EMERGENCY TELEPHONE NO. | 318/491-5070 |

## 2. HAZARDOUS INGREDIENTS

| MATERIAL OR COMPONENT | %   | HAZARD DATA |
|-----------------------|-----|-------------|
| Ethylene Dichloride   | 100 |             |

## 3. PHYSICAL DATA

|                         |                                                    |                                         |      |
|-------------------------|----------------------------------------------------|-----------------------------------------|------|
| BOILING POINT (°F)      | 182°F                                              | SPECIFIC GRAVITY (H <sub>2</sub> O = 1) | 1.25 |
| VAPOR PRESSURE (mm Hg.) | 62 @ 68°F                                          | PERCENT VOLATILE BY VOLUME (%)          |      |
| VAPOR DENSITY (AIR = 1) | 3.42                                               | EVAPORATION RATE (_____ = 1)            |      |
| SOLUBILITY IN WATER     | 0.81%                                              | MELTING POINT                           |      |
| APPEARANCE AND ODOR     | Clear, oily liquid with sweet chloroform-like odor |                                         |      |

## 4. FIRE AND EXPLOSION DATA

|                                         |                                                                                                                 |                             |               |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------|---------------|
| FLASH POINT<br>(TEST METHOD)            | 23°C<br>(COC)                                                                                                   | AUTOIGNITION<br>TEMPERATURE |               |
| FLAMMABLE LIMITS IN AIR. % BY VOL       | LOWER                                                                                                           | 6.2                         | UPPER<br>15.9 |
| EXTINGUISHING<br>MEDIA                  | Dry chemical, foam, water spray.<br>CCR 000001593                                                               |                             |               |
| SPECIAL FIRE<br>FIGHTING<br>PROCEDURES  | Self-contained breathing apparatus should be worn when fighting fires. Cool exposed equipment with water spray. |                             |               |
| UNUSUAL FIRE<br>AND EXPLOSION<br>HAZARD | When burning, EDC releases hydrogen chloride, <sup>phosgene</sup> and other irritating combustion products.     |                             |               |

## 5. HEALTH HAZARD INFORMATION

### FIRST AID

**EYES:** Flush with large amounts of water for at least 15 minutes. Seek medical aid.

**SKIN:** Flush with large amounts of water, wash affected area with soap and water. If irritation persists, seek medical aid.

**INHALATION:** Remove from exposure. If breathing has stopped, administer artificial respiration or oxygen and cardio-pulmonary resuscitation if necessary. Seek medical aid immediately.

**INGESTION:** Do not induce vomiting. Seek medical aid.

### NATURE OF HAZARD

**EYES:** Exposure to vapors is irritating to the eyes. Prolonged exposures may have corneal effects.

**SKIN:** Exposure to the liquid is irritating to the skin. Prolonged or repeated exposures may result in dermatitis.

**INHALATION:** Breathing of vapors is irritating to the upper respiratory tract at low concentrations. Exposure to higher concentrations results in narcosis, nausea, vomiting, stupor and unconsciousness.

**INGESTION:** Systemic effects on kidney and liver.

#### EFFECTS OF OVEREXPOSURE:

##### ACUTE OVEREXPOSURE:

Irritation of upper respiratory tract, dizziness, nausea, vomiting, stupor, unconsciousness, possibly fatal.

##### CHRONIC OVEREXPOSURE:

Loss of appetite, nausea, tremors, and systemic effects on the liver and kidneys.

### THRESHOLD LIMIT VALUE (TLV)

1980 ACGIH TLV: 10 ppm 8-hour time weighted average  
15 ppm 15-minute short term exposure limit

### TOXICITY DATA

**SKIN CONTACT:**

**EYE CONTACT:**

**INHALATION:**

**INGESTION:**

CCR 000001594

### SPECIAL PRECAUTIONS:

## 6. REACTIVITY DATA

### CONDITIONS CONTRIBUTING TO INSTABILITY

High temperatures.

### INCOMPATIBILITY

Reacts violently with ammonia or amines.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hydrogen chloride, carbon monoxide, phosgene

### CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION

Should not occur

## 7. SPILL OR LEAK PROCEDURES

### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Contain the spill. Eliminate all ignition sources and evacuate the area around large spills. Water spray may be used to reduce vapors. Flush small amounts with water.

### NEUTRALIZING CHEMICALS

### WASTE DISPOSAL METHOD

Incinerate under controlled conditions in equipment with a hydrochloric acid scrubber, according to local, state and federal regulations.

## 8. SPECIAL PROTECTION INFORMATION

### VENTILATION REQUIREMENTS

EDC should only be handled in well ventilated areas. Local exhaust ventilation is recommended wherever possible.

### SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

#### RESPIRATORY (SPECIFY IN DETAIL):

NIOSH approved organic vapor air-purifying respirator or air-supplied respirators dependent on concentration.

#### EYE:

Chemical safety goggles. Face shield should also be worn if there is a potential for splashing.

#### GLOVES:

Impervious chemical gloves. Rubber gloves are not suitable, for repeated use.

CCR 000001595

#### OTHER CLOTHING AND EQUIPMENT:

Other impervious clothing may be needed as required to prevent skin contact.

## 9. SPECIAL PRECAUTIONS

### HAZARD CLASSIFICATION INFORMATION

|                                     |                                           |
|-------------------------------------|-------------------------------------------|
| IMCO HAZARD CLASS AND NUMBER<br>3.2 | US DOT CLASSIFICATION<br>Flammable liquid |
| UN NUMBER<br>1184                   | EEC DANGEROUS SUBSTANCE CLASSIFICATION    |
| ADR CLASS NUMBER                    | EEC SPECIAL RISKS AND SAFETY ADVICE       |
| CAS NUMBER<br>540-59-0              |                                           |

### TRANSPORTATION AND STORAGE

|                               |                                                |
|-------------------------------|------------------------------------------------|
| USUAL SHIPPING CONTAINERS     | ELECTROSTATIC ACCUMULATION HAZARD              |
|                               | STORAGE/TRANSPORT PRESSURE                     |
| STORAGE TRANSPORT TEMPERATURE | LOADING/UNLOADING TEMPERATURE                  |
|                               | VISCOSITY AT LOADING/<br>UNLOADING TEMPERATURE |

### HANDLING AND STORAGE MATERIALS AND COATINGS

| SUITABLE                                                    | UNSUITABLE                        |
|-------------------------------------------------------------|-----------------------------------|
| Carbon steel<br>Polyethylene<br>Teflon<br>Glass-lined steel | PVC<br>Rubber<br>Expoxy materials |

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CCR 000001596

12/18/81



Conoco Chemicals  
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P.O. Box 2197  
Houston, Texas 77001

# MATERIAL SAFETY DATA SHEET

## 1. PRODUCT IDENTIFICATION

|                       |                                  |                         |              |
|-----------------------|----------------------------------|-------------------------|--------------|
| MANUFACTURER'S NAME   | Conoco Chemicals                 |                         |              |
| ADDRESS               | P.O. Box 605, Westlake, LA 70669 |                         |              |
| TRADE NAME            | Vinyl Chloride Monomer           |                         |              |
| SYNONYMS              | VCM, Chloroethene                |                         |              |
| REGULAR TELEPHONE NO. | 318/419-5039                     | EMERGENCY TELEPHONE NO. | 318/491-5070 |

## 2. HAZARDOUS INGREDIENTS

| MATERIAL OR COMPONENT | %  | HAZARD DATA |
|-----------------------|----|-------------|
| Vinyl Chloride        | 99 |             |

## 3. PHYSICAL DATA

|                         |                                                            |                                         |      |
|-------------------------|------------------------------------------------------------|-----------------------------------------|------|
| BOILING POINT (°F)      | 7.0                                                        | SPECIFIC GRAVITY (H <sub>2</sub> O = 1) | .912 |
| VAPOR PRESSURE (mm Hg.) | 2580 (@ 68°F)                                              | PERCENT VOLATILE BY VOLUME (%)          | 100% |
| VAPOR DENSITY (AIR = 1) | 2.15                                                       | EVAPORATION RATE (_____ = 1)            |      |
| SOLUBILITY IN WATER     | nil                                                        | MELTING POINT                           |      |
| APPEARANCE AND ODOR     | Colorless gas or liquid under pressure - faint, sweet odor |                                         |      |

## 4. FIRE AND EXPLOSION DATA

|                                   |                                                                                                                      |                          |            |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------|------------|
| FLASH POINT (TEST METHOD)         | -108°F (PM)                                                                                                          | AUTOIGNITION TEMPERATURE |            |
| FLAMMABLE LIMITS IN AIR. % BY VOL | LOWER                                                                                                                | 4.0                      | UPPER 22.0 |
| EXTINGUISHING MEDIA               | Dry chemical, foam and water fog CCR 000001597                                                                       |                          |            |
| SPECIAL FIRE FIGHTING PROCEDURES  | Self-contained breathing apparatus should be worn when fighting fires. Cool exposed equipment with water spray.      |                          |            |
| UNUSUAL FIRE AND EXPLOSION HAZARD | Vapors can form flammable mixtures in air at normal ambient conditions. Burning VCM generates hydrogen chloride gas. |                          |            |

## 5. HEALTH HAZARD INFORMATION

### FIRST AID

- EYES:** Flush with large amounts of water for at least 15 minutes. Seek medical aid.
- SKIN:** Flush affected area with large amounts of water for at least 15 minutes. Seek medical aid.
- INHALATION:** Remove to fresh air. If breathing has stopped, administer artificial respiration or oxygen and cardio-pulmonary resuscitation if necessary. Seek medical aid.
- INGESTION:**

### NATURE OF HAZARD

- EYES:** Contact with liquid VCM will cause frostbite type burns.
- SKIN:** Contact with liquid causes frostbite. Prolonged contact with the liquid may result in other systemic affects.
- INHALATION:** Exposure to concentrated vapors causes drowsiness, blurring of vision, anesthesia progressing to coma and may be fatal. Prolonged exposure may cause cancer.
- INGESTION:**
- EFFECTS OF OVEREXPOSURE:**
- ACUTE OVEREXPOSURE:** Drowsiness; Anesthesia; Unconsciousness, Possibly Fatal.
- CHRONIC OVEREXPOSURE:** Prolonged exposure may cause cancer.

### THRESHOLD LIMIT VALUE (TLV)

OSHA Permissible Exposure Limit: 1.0 ppm 8-hour time-weighted average  
5.0 ppm Peak exposure for any 15 minute period

### TOXICITY DATA

**SKIN CONTACT:**

**EYE CONTACT:**

**INHALATION:** CCR 00000159B

**INGESTION:**

### SPECIAL PRECAUTIONS:

## 6. REACTIVITY DATA

### CONDITIONS CONTRIBUTING TO INSTABILITY

Exposure to air, oxygen, sunlight, moisture, heat, and all sources of ignition

**INCOMPATIBILITY** Oxidizing materials, copper or copper alloys, aluminum or aluminum alloys, other metals which form acetylides

### HAZARDOUS DECOMPOSITION PRODUCTS

Hydrogen chloride, carbon monoxide

### CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION

Polymerizes slowly in presence of air, sunlight or oxygen and rapidly in the presence of peroxides, generates considerable heat.

## 7. SPILL OR LEAK PROCEDURES

### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Evacuate area. Allow only properly protected personnel to enter area. Prevent vapor or liquid from entering sewers or other low areas.

### NEUTRALIZING CHEMICALS

### WASTE DISPOSAL METHOD

Incinerate in equipment with a hydrochloric acid scrubber according to local, state and federal regulations.

## 8. SPECIAL PROTECTION INFORMATION

### VENTILATION REQUIREMENTS

Vinyl chloride should be handled only in well ventilated areas. Local exhaust ventilation is recommended wherever possible.

### SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

#### RESPIRATORY (SPECIFY IN DETAIL):

NIOSH approved canister respirator for VCM or air-supplied respirators dependent on concentration.

**EYE:** Chemical goggles and faceshield if possibility for contact with liquid VCM exists.

**GLOVES:** Rubber or other impervious material to prevent contact with the liquid.

#### OTHER CLOTHING AND EQUIPMENT:

Other impervious clothing as needed to prevent skin contact with liquid VCM.

CCR 000001599

## 9. SPECIAL PRECAUTIONS

### HAZARD CLASSIFICATION INFORMATION

|                                     |                                        |
|-------------------------------------|----------------------------------------|
| IMCO HAZARD CLASS AND NUMBER<br>2.1 | US DOT CLASSIFICATION<br>Flammable Gas |
| UN NUMBER<br>1086                   | EEC DANGEROUS SUBSTANCE CLASSIFICATION |
| ADR CLASS NUMBER                    | EEC SPECIAL RISKS AND SAFETY ADVICE    |
| CAS NUMBER<br>75-01-4               |                                        |

### TRANSPORTATION AND STORAGE

|                               |                                                |
|-------------------------------|------------------------------------------------|
| USUAL SHIPPING CONTAINERS     | ELECTROSTATIC ACCUMULATION HAZARD              |
|                               | STORAGE/TRANSPORT PRESSURE                     |
| STORAGE TRANSPORT TEMPERATURE | LOADING/UNLOADING TEMPERATURE                  |
|                               | VISCOSITY AT LOADING/<br>UNLOADING TEMPERATURE |

### HANDLING AND STORAGE MATERIALS AND COATINGS

| SUITABLE     | UNSUITABLE                                                                               |
|--------------|------------------------------------------------------------------------------------------|
| Carbon steel | Copper or copper alloys<br>Aluminum or aluminum alloys<br>Other acetylide forming metals |

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CCR 000001600

12/18/81



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Houston, Texas 77001

# MATERIAL SAFETY DATA SHEET

## 1. PRODUCT IDENTIFICATION

|                         |                                  |
|-------------------------|----------------------------------|
| MANUFACTURER'S NAME     | Conoco Chemicals Company         |
| ADDRESS                 | P.O. Box 605, Westlake, LA 70669 |
| TRADE NAME              | VCM Tars By-Product              |
| SYNONYMS                |                                  |
| REGULAR TELEPHONE NO.   | 318/491-5039                     |
| EMERGENCY TELEPHONE NO. | 318/491-5070                     |

## 2. HAZARDOUS INGREDIENTS

| MATERIAL OR COMPONENT               | %      | HAZARD DATA |
|-------------------------------------|--------|-------------|
| Ethylene Dichloride                 | 8.0-25 |             |
| 1,1,2-Trichloroethane               | 35-65  |             |
| Other chlorinated C-4's and heavier | >30    |             |

## 3. PHYSICAL DATA

|                         |  |                                         |  |
|-------------------------|--|-----------------------------------------|--|
| BOILING POINT (°F)      |  | SPECIFIC GRAVITY (H <sub>2</sub> O = 1) |  |
| VAPOR PRESSURE (mm Hg.) |  | PERCENT VOLATILE BY VOLUME (%)          |  |
| VAPOR DENSITY (AIR = 1) |  | EVAPORATION RATE (_____ = 1)            |  |
| SOLUBILITY IN WATER     |  | MELTING POINT                           |  |
| APPEARANCE AND ODOR     |  |                                         |  |

## 4. FIRE AND EXPLOSION DATA

|                                   |                                                                                                                 |                          |       |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------|-------|
| FLASH POINT (TEST METHOD)         |                                                                                                                 | AUTOIGNITION TEMPERATURE |       |
| FLAMMABLE LIMITS IN AIR. % BY VOL | LOWER                                                                                                           |                          | UPPER |
| EXTINGUISHING MEDIA               | Dry chemical, foam, water spray. CCR 000001601                                                                  |                          |       |
| SPECIAL FIRE FIGHTING PROCEDURES  | Self-contained breathing apparatus should be worn when fighting fires. Cool exposed equipment with water spray. |                          |       |
| UNUSUAL FIRE AND EXPLOSION HAZARD | When burning, EDC releases hydrogen chloride, phosgene, and other irritating combustion products.               |                          |       |

## 5. HEALTH HAZARD INFORMATION

### FIRST AID

- EYES:** Flush with large amounts of water for at least 15 minutes. Seek medical aid.
- SKIN:** Flush with large amounts of water, wash affected area with soap and water. If irritation persists, seek medical aid.
- INHALATION:** Remove from exposure. If breathing has stopped, administer artificial respiration or oxygen and cardio-pulmonary resuscitation if necessary. Seek medical aid immediately.
- INGESTION:** Do not induce vomiting. Seek medical aid.

### NATURE OF HAZARD

- EYES:** Exposure to vapor is irritating to the eyes. Prolonged exposures may have corneal effects.
- SKIN:** Exposure to the liquid is irritating to the skin. Prolonged or repeated exposures may result in dermatitis.
- INHALATION:** Breathing of vapors is irritating to the upper respiratory tract at low concentrations. Exposure to higher concentrations results in narcosis, nausea, vomiting, stupor and unconsciousness.
- INGESTION:** Systemic effects on kidney and liver.
- EFFECTS OF OVEREXPOSURE:**
- ACUTE OVEREXPOSURE:** Irritation of upper respiratory tract, dizziness, nausea, vomiting, stupor, unconsciousness, possibly fatal.
- CHRONIC OVEREXPOSURE:** Loss of appetite, nausea, tremors, and systemic effects on the liver and kidneys.

### THRESHOLD LIMIT VALUE (TLV) Based on Ethylene Dichloride Content

1980 ACGIH TLV: 10 ppm 8-hour time weighted average  
15 ppm 15-minute short term exposure limit

### TOXICITY DATA

**SKIN CONTACT:**

**EYE CONTACT:**

**INHALATION:**

**INGESTION:** CCR 000001602

### SPECIAL PRECAUTIONS:

## 6. REACTIVITY DATA

### CONDITIONS CONTRIBUTING TO INSTABILITY

High temperatures.

### INCOMPATIBILITY

Reacts violently with ammonia or amines.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hydrogen chloride, carbon monoxide, phosgene

### CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION

Should not occur

## 7. SPILL OR LEAK PROCEDURES

### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Contain the spill. Eliminate all ignition sources and evacuate the area around large spills. Water spray may be used to reduce vapors. Flush small amounts with water.

### NEUTRALIZING CHEMICALS

### WASTE DISPOSAL METHOD

Incinerate under controlled conditions in equipment with a hydrochloric acid scrubber, according to local, state and federal regulations.

## 8. SPECIAL PROTECTION INFORMATION

### VENTILATION REQUIREMENTS

This product should only be handled in well ventilated areas. Local exhaust ventilation is recommended wherever possible.

### SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

#### RESPIRATORY (SPECIFY IN DETAIL):

NIOSH approved organic vapor air-purifying respirator or air-supplied respirators dependent on concentration.

#### EYE:

Chemical safety goggles. Face shield should also be worn if there is a potential for splashing.

#### GLOVES:

Impervious chemical gloves. Rubber gloves are not suitable, for repeated use.

#### OTHER CLOTHING AND EQUIPMENT:

Other impervious clothing may be needed as required to prevent skin contact.

CCR 000001603

## 9. SPECIAL PRECAUTIONS

### HAZARD CLASSIFICATION INFORMATION

|                              |                                             |
|------------------------------|---------------------------------------------|
| IMCO HAZARD CLASS AND NUMBER | US DOT CLASSIFICATION<br>Combustible liquid |
| UN NUMBER                    | 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/<br>UNLOADING TEMPERATURE |

### HANDLING AND STORAGE MATERIALS AND COATINGS

|          |            |
|----------|------------|
| SUITABLE | UNSUITABLE |
|          |            |

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12/18/81

CCR 000001604



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** P.O. Box 605, Westlake, LA 70669

**TRADE NAME** Vinyl Chloride Light Ends

**SYNONYMS**

**REGULAR TELEPHONE NO.** 318/491-5039

**EMERGENCY TELEPHONE NO.** 318/491-5070

## 2. HAZARDOUS INGREDIENTS

| MATERIAL OR COMPONENT         | %       | HAZARD DATA |
|-------------------------------|---------|-------------|
| Vinyl Chloride                | 1.0-5.0 |             |
| Ethyl Chloride                | 25-30   |             |
| Trichloromethane (Chloroform) | 15-30   |             |
| Carbon Tetrachloride          | 5-12    |             |

## 3. PHYSICAL DATA

|                                |  |                                              |  |
|--------------------------------|--|----------------------------------------------|--|
| <b>BOILING POINT (°F)</b>      |  | <b>SPECIFIC GRAVITY (H<sub>2</sub>O = 1)</b> |  |
| <b>VAPOR PRESSURE (mm Hg.)</b> |  | <b>PERCENT VOLATILE BY VOLUME (%)</b>        |  |
| <b>VAPOR DENSITY (AIR = 1)</b> |  | <b>EVAPORATION RATE</b><br>(_____ = 1)       |  |
| <b>SOLUBILITY IN WATER</b>     |  | <b>MELTING POINT</b>                         |  |
| <b>APPEARANCE AND ODOR</b>     |  |                                              |  |

## 4. FIRE AND EXPLOSION DATA

|                                           |                                                                                                                                   |                                 |              |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------|
| <b>FLASH POINT (TEST METHOD)</b>          |                                                                                                                                   | <b>AUTOIGNITION TEMPERATURE</b> |              |
| <b>FLAMMABLE LIMITS IN AIR. % BY VOL.</b> | <b>LOWER</b>                                                                                                                      |                                 | <b>UPPER</b> |
| <b>EXTINGUISHING MEDIA</b>                | Dry Chemical; foam or water spray                                                                                                 |                                 |              |
| <b>SPECIAL FIRE FIGHTING PROCEDURES</b>   | Self-contained breathing apparatus should be worn while fighting fires. Cool exposed equipment with water spray.                  |                                 |              |
| <b>UNUSUAL FIRE AND EXPLOSION HAZARD</b>  | When burning this product releases hydrogen chloride, phosgene and other toxic gases which may be fatal with excessive exposures. |                                 |              |

CCR 000001605

## 5. HEALTH HAZARD INFORMATION

### FIRST AID

- EYES:** Flush with large amounts of water for at least 15 minutes. Seek medical aid.
- SKIN:** Flush with large amounts of water, wash affected area with soap and water. If irritation persists, seek medical aid.
- INHALATION:** Remove from exposure. If breathing has stopped, administer artificial respiration or oxygen and cardio-pulmonary resuscitation if necessary. Seek medical aid immediately.
- INGESTION:** Do not induce vomiting. Seek medical aid.

### NATURE OF HAZARD

- EYES:** Exposures to concentrated vapor or liquid is irritating to the eye.
- SKIN:** Exposure to liquid is irritating to the skin. Prolonged or repeated contact may cause dermatitis. Due to vinyl chloride content frostbite type burns may occur.
- INHALATION:** Breathing of vapors is irritating to the upper respiratory tract. Exposure to higher concentrations results in narcosis, nausea, vomiting, and unconsciousness.
- INGESTION:** May result in systemic effects of the kidney and liver.

#### EFFECTS OF OVEREXPOSURE:

- ACUTE OVEREXPOSURE:** Irritation of upper respiratory tract. Narcosis, dizziness, unconsciousness.
- CHRONIC OVEREXPOSURE:** Loss of appetite, nausea, systemic effects on the liver and kidney.

### THRESHOLD LIMIT VALUE (TLV)

Based on the vinyl chloride content of this material:

OSHA Permissible Exposure Limit: 1.0 ppm 8-hour time weighted Average  
5.0 ppm Peak exposure for any 15-min. period

### TOXICITY DATA

**SKIN CONTACT:**

**EYE CONTACT:**

**INHALATION:**

**INGESTION:** CCR 000001606

**SPECIAL PRECAUTIONS:** CONTAINS VINYL CHLORIDE-CANCER SUSPECT AGENT

## 6. REACTIVITY DATA

### CONDITIONS CONTRIBUTING TO INSTABILITY

High temperatures

### INCOMPATIBILITY

Strong oxidizers

### HAZARDOUS DECOMPOSITION PRODUCTS

Combustion products of hydrogen chloride, phosgene

### CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION

## 7. SPILL OR LEAK PROCEDURES

### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Contain the spill. Evacuate the area and eliminate all sources of ignition. Waterspray may be used to reduce vapors. Flush small spills with large amounts of water.

### NEUTRALIZING CHEMICALS

### WASTE DISPOSAL METHOD

Incinerate under controlled conditions in equipment with an acid scrubber according to local, state and federal regulations.

## 8. SPECIAL PROTECTION INFORMATION

### VENTILATION REQUIREMENTS

This product should only be handled in well ventilated areas. Local exhaust ventilation should be used wherever possible.

### SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

#### RESPIRATORY (SPECIFY IN DETAIL):

NIOSH approved organic vapor air-purifying respirator or air supplied respirators dependent on concentration.

#### EYE:

Chemical safety goggles. Face shield should also be worn if there is a potential for splashing.

#### GLOVES:

Impervious chemical gloves. Rubber gloves are not suitable for repeated use.

#### OTHER CLOTHING AND EQUIPMENT:

Other impermeous clothing may be needed to prevent skin contact.

CCR 000001607

## 9. SPECIAL PRECAUTIONS

### HAZARD CLASSIFICATION INFORMATION

|                              |                                           |
|------------------------------|-------------------------------------------|
| IMCO HAZARD CLASS AND NUMBER | US DOT CLASSIFICATION<br>Flammable liquid |
| UN NUMBER                    | 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/<br>UNLOADING TEMPERATURE |

### HANDLING AND STORAGE MATERIALS AND COATINGS

|          |            |
|----------|------------|
| SUITABLE | UNSUITABLE |
|          |            |

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