

CHEM-TREND LIMITED PARTNERSHIP  
MATERIAL SAFETY DATA SHEET  
EMERGENCY TELEPHONE NO. 517-546-4520

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MR-515  
MANUFACTURER'S NAME: CHEM-TREND LIMITED PARTNERSHIP  
ADDRESS: 1445 W. MCPHERSON PARK DR.  
HOWELL, MI 48844-0860  
CHEMICAL FAMILY: Silicone blend in organic solvent

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>INGREDIENT(S)</u>	<u>CONC.</u>	<u>CAS NUMBER</u>
1. LIGHT ALIPHATIC NAPHTHA	40-50%	***
2. METHYLENE CHLORIDE*	40-50%	75-09-2
3. PROPYLENE OXIDE*	< 0.3%	75-56-9
4. SILICONE RELEASE BLEND**	5-10%	***

\* This chemical is subject to the reporting requirements of section 313 of SARA Title III.

\*\* Ingredients are nonhazardous (based on suppliers' MSDS forms) as compounded, when the product is used as directed.

\*\*\* All ingredients are listed in the TSCA inventory or meet EPA criteria for exemption.

EXPOSURE LIMITS

<u>INGREDIENT</u>	<u>OSHA TWA</u>	<u>ACGIH TLV</u>	<u>STEL</u>	<u>UNITS</u>	<u>NOTES</u>
1.	500.000	400.000	500	PPM	
2.	25.000	50.000	125	PPM	
3.	20.000	20.000		PPM	

3. HAZARDS IDENTIFICATION

LISTED CARCINOGENS (NTP, IARC OR OSHA): This product contains listed carcinogens.

ROUTES OF EXPOSURE AND ACUTE EFFECTS:

NOTE: The following hazards described below are those of the solvent system.

Skin Contact: Prolonged or repeated contact may defat skin which may cause irritation or dermatitis. In extreme cases, such as liquid confined inside gloves, skin burns may occur.

Eye Contact: Liquid product splashed in the eye will probably irritate the eye.

Inhalation: Vapor concentrations above the TLV may cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, and headache. At very high levels, anesthesia and asphyxiation are possible.

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3. **HAZARDS IDENTIFICATION CONTINUED**

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Ingestion: May cause irritation of the gastrointestinal (digestive) tract. Acute oral toxicity of the solvent mixture has not been measured but is assumed to be low on the basis of knowledge of the components. If product is accidentally swallowed, DO NOT induce vomiting because of the danger of aspiration of the solvent into the lungs, which can be fatal due to chemical pneumonitis.

CHRONIC EFFECTS: There is little or no evidence for adverse effects on humans due to long-term exposure to vapors of the component solvents at TLV levels or below. There are a few reports of damage to animal organs for individual components of the solvent mixture, but only at exposure levels above TLV.

OTHER HAZARDS:

METHYLENE CHLORIDE

"For hazard communication purposes under OSHA Standard 29 CFR 1910.1200, methylene chloride and propylene oxide have been listed as potential carcinogens by IARC. Methylene chloride has been shown to increase the rate of spontaneously occurring malignant tumors in the B6C3F1 mouse and benign tumors in laboratory rats. Other animal studies, as well as several human epidemiology studies, failed to show a tumorigenic response relatable to methylene chloride. Methylene chloride is not believed to pose a measurable carcinogenic risk to man when handled as recommended. Lifetime inhalation studies in laboratory animals with propylene oxide suggest a weak carcinogenic effect. Birth defects are unlikely. Exposures having no effect on the mother should have no effect on the fetus. Did not cause birth defects in animals; other effects were seen in the fetus only at doses which caused toxic effects to the mother. In animal studies, has been shown not to interfere with reproduction. Negative or equivocal results have been obtained in mutagenicity tests using mammalian cells or animals. This is consistent with the lack of interaction with DNA in rats and hamsters. Although results of Ames bacterial test have generally been positive, overall the data suggest that genotoxic potential does not appear to be a significant factor in the toxicity of methylene chloride. Results of in vitro (test tube) mutagenicity studies with propylene oxide have been positive; results of most tests in animals have been negative and some were positive." In addition, methylene chloride and propylene oxide have been listed as substances which may reasonably be anticipated to be carcinogens by NTP.

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4. **FIRST AID MEASURES**

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EMERGENCY AND FIRST AID PROCEDURES:

Skin Contact: Wash with soap and water. Launder contacted clothing before reuse.

Eye Contact: Flush with water for at least 15 minutes. Contact a physician.

Inhalation: If adverse effects such as dizziness, nausea or irritation are noted, move to fresh air. Contact physician.

Ingestion: If product is swallowed, DO NOT induce vomiting. Contact a physician immediately.

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5. FIRE FIGHTING MEASURES

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FLASH POINT (deg.F): None to boiling\*

FLAMMABLE LIMITS IN AIR, % BY VOLUME:

	LOWER(lei)	UPPER(uei)
LIGHT ALIPHATIC NAPHTHA	1	6.7
METHYLENE CHLORIDE	14	22

EXTINGUISHING MEDIA: Use foam, carbon dioxide or dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus when fire fighting in a confined space.

UNUSUAL FIRE AND EXPLOSION HAZARDS: \*Although chlorinated solvents in this product will not burn, vapors concentrated in a confined or poorly ventilated area could be ignited upon contact with a spark, flame or high intensity energy source. See flammable limits above for concentrations at which this can occur. Under normal handling conditions, the likelihood of such heavy concentrations should be remote.

Acid fumes may be present from decompositon of the chlorinated solvent during a fire.

CONTAINER HANDLING: Do not cut, puncture or weld on empty drum because it may contain explosive or harmful vapors.

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6. ACCIDENTAL RELEASE MEASURES

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Small Spills: Soak up with absorbent material.

Large Spills: Eliminate all sources of ignition. Vapors are heavier than air and may spread long distances or collect in low spots. Dike area to prevent runoff, recover liquid and soak up remaining liquid with absorbent material.

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7. HANDLING AND STORAGE

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PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Ground all equipment pumping the product. Protect from static electrical sparks or other ignition sources. Do not use aluminum, magnesium or zinc containers, spray, mixing, or filter equipment with this product. The product is acceptable for use on aluminum, magnesium, and zinc molds and exhaust systems.

Store away from strong oxidizers. Avoid contact with water.

Do not store at temperatures above 110 deg. F to avoid vapor pressure in closed containers. Keep containers closed when not in use.

OTHER PRECAUTIONS: None known

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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RESPIRATORY PROTECTION: Good industrial hygiene practices recommend that engineering controls (such as local and/or mechanical ventilation) be used to reduce environmental concentrations to the permissible exposure level.

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8. **EXPOSURE CONTROLS / PERSONAL PROTECTION CONTINUED**

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Respirators may be used when engineering and work practice controls are not technically feasible, when such controls are in the process of being installed, or when they fail and need to be supplemented. If the use of a respirator is necessary use only a MSHA/NIOSH approved air supplied respirator or an air-purifying respirator.

PROTECTIVE GLOVES: Impervious gloves (such as polyvinyl alcohol).

EYE PROTECTION: Safety glasses with side shields or chemical goggles.

OTHER PROTECTIVE EQUIPMENT: Appropriate clothing to avoid skin contact.

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9. **PHYSICAL AND CHEMICAL PROPERTIES**

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BOILING POINT (deg.F) (Initial):	104
SPECIFIC GRAVITY:	0.93
VAPOR PRESSURE (mm Hg):	340 (methylene chloride)
VAPOR DENSITY (air=1)	> 1
PERCENT VOLATILE BY WEIGHT:	90-95
EVAPORATION RATE (ETHER=1)	< 1
SOLUBILITY IN WATER:	Nil
pH:	Not applicable
APPEARANCE AND ODOR:	Clear fluid; chlorinated solvent odor

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10. **STABILITY AND REACTIVITY**

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STABILITY: Stable

CONDITIONS TO AVOID: None known

INCOMPATIBILITY: Store away from strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrocarbon decomposition products and formaldehyde at elevated temperatures. Acid fumes may be generated in a major fire due to decomposition of chlorinated solvents.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: None known

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11. **DISPOSAL CONSIDERATIONS**

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Dispose of in accordance with local, state and federal regulations.

RCRA HAZARDOUS WASTE DESIGNATION: This product does fall under current EPA RCRA definitions of hazardous waste with designation:  
F002 - METHYLENE CHLORIDE

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12. **TRANSPORTATION INFORMATION**

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PROPER SHIPPING NAME: TOXIC LIQUIDS, ORGANIC, N.O.S. (DICHLOROMETHANE)

HAZARD CLASS: 6.1

HAZARD ID NUMBER: UN2810 PG III

OCCUPATIONAL SAFETY And HEALTH ADMINISTRATION (OSHA)  
29 CFR 1910.1200 Hazardous Chemical: YES

SUPERFUND AMENDMENTS And REAUTHORIZATION ACT OF 1986 (SARA)  
Section 302, Extremely Hazardous Substance: YES  
Section 311, Hazardous Chemical: YES  
Hazard categories: Fire - NO, Reactivity - NO  
Sudden release of pressure - NO, Immediate - YES, Delayed - YES

TOXIC SUBSTANCE CONTROL ACT (TSCA)  
This product is a mixture and is not listed in the TSCA Inventory. The individual ingredients in the product are listed in the inventory.

CERCLA (Superfund) REPORTABLE QUANTITY: This product contains CERCLA reportable chemicals: METHYLENE CHLORIDE, RQ = 1000 LBS.; PROPYLENE OXIDE, RQ = 100 LBS.

APPROVAL: ISSUED: 08/27/01 REVIEWED: 08/27/01

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**DISCLAIMER**

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