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U.S. DEPARTMENT OF LABOR

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81091-259

MATERIAL SAFETY DATA SHEET

1- S.D. File
1- R. M. Cutchan

SECTION I					
MANUFACTURER'S NAME MONSANTO COMPANY			EMERGENCY TELEPHONE NO. (314) 694-1000		
ADDRESS (Number, Street, City, State, and ZIP Code) 800 North Lindbergh Boulevard, St. Louis, Missouri 63166					
CHEMICAL NAME AND SYNONYMS Mixture			TRADE NAME AND SYNONYMS Therminol FR-0		
CHEMICAL FAMILY Chlorinated Aromatic			FORMULA Mixture		
SECTION II HAZARDOUS INGREDIENTS					
PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL FLUX COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)
SECTION III PHYSICAL DATA					
BOILING POINT (°F.)		760 mm	520-615	SPECIFIC GRAVITY (H ₂ O=1) (25/15.5°C)	
VAPOR PRESSURE (mm Hg.)		at 200°F	1.35	PERCENT VOLATILE BY VOLUME (5%)	
VAPOR DENSITY (AIR=1)		Not Avail	Evap	EVAPORATION RATE (BuAc = 1)	
SOLUBILITY IN WATER		at 20°C negligible			
APPEARANCE AND ODOR		colorless oil	aromatic odor		
SECTION IV FIRE AND EXPLOSION HAZARD DATA					
FLASH POINT (Method used)		None	FLAMMABLE LIMITS		
EXTINGUISHING MEDIA		N.A.			
SPECIAL FIRE FIGHTING PROCEDURES Respiratory protection when fighting fires where exposure to vapors or gases is possible.					
UNUSUAL FIRE AND EXPLOSION HAZARDS Highly toxic gases (chlorides & chlorine) can be evolved in fires of this product.					

DSW 267554

THRESHOLD LIMIT VALUE	Not available.
EFFECTS OF OVEREXPOSURE	Skin irritation in the form of chloracne, systematic intoxication leads to nausea, vomiting, loss of weight, edema and abdominal pain
EMERGENCY AND FIRST AID PROCEDURES	Remove from exposure. Remove contaminated clothing. Wash contacted area with large amounts of water and soap. Refer to physician.

SECTION VI REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid)			
HAZARDOUS DECOMPOSITION PRODUCTS CO, CO ₂ , smoke, soot, chlorides and chlorine.			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	Absorb on clay, sawdust or other absorbant material. Place in drums. Bury in approved chemical landfill in accordance with local and state regulations.
WASTE DISPOSAL METHOD	Burn in an approved incinerator in accordance with local and state regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify)			
Bureau of Mines approved respirator for organic vapors.			
VENTILATION	LOCAL EXHAUST	Yes - for vapors	SPECIAL
	MECHANICAL (General)		OTHER
PROTECTIVE GLOVES	rubber	EYE PROTECTION	chemical goggles
OTHER PROTECTIVE EQUIPMENT			

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	Avoid skin and eye contact.
	Avoid inhalation of vapors
OTHER PRECAUTIONS	

DSW 267555

While the information and recommendations set forth herein are believed to be accurate as of the date hereof, MONSANTO COMPANY MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

JAG:HOH:JTG:WBP

1/24/72