TR 70230-50 TR70231-50 TR 70234-10

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

REC'D DEC 11 1987

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917) DPM 157

SECTION I

MANUFACTURER'S NAME: E. I. du Pont de Nemours & Co., Inc.	EMERGENCY TELEPHONE NO.: (302) 774-1000
ADDRESS: Freon Products Division, Wilmington, Delaware 19898	
CHEMICAL NAME AND SYNONYMS: Dichlorodifluoromethane	TRADE NAME AND SYNONYMS: "Freon" 12 (- "DUST CHASER")
CHEMICAL FAMILY: Halogenated Hydrocarbon	FORMULA: CCl_2F_2

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 PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	-21.6	SPECIFIC GRAVITY (H_2O=1) 77°F	1.31
VAPOR PRESSURE (mm Hg.) 77°F, PSIA	94.5	PERCENT, VOLATILE BY VOLUME (%)	100
VAPOR DENSITY (AIR=1) 77°F	4.3	EVAPORATION RATE (_____ =1) (n Butyl Acetate=1) RAPID	
SOLUBILITY IN WATER 77°, by weight	0.02	Molecular Weight	120.92

APPEARANCE AND ODOR: Colorless Liquid - Slight Ethereal Odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	FLAMMABLE LIMITS	Lel	Uel

EXTINGUISHING MEDIA

SPECIAL FIRE FIGHTING PROCEDURES

UNUSUAL FIRE AND EXPLOSION HAZARDS
Usually shipped and stored as a liquefied, compressed gas under pressure.

(Continued on reverse side)

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
1000 ppm

EFFECTS OF OVEREXPOSURE
Light-headedness, giddiness, shortness of breath, possible narcosis, possible cardiac arrhythmias at high concentrations.

EMERGENCY AND FIRST AID PROCEDURES
Inhalation: Remove to fresh air, call a physician, do not give epinephrine or similar drugs. Skin or eye contact: flush with water.

SECTION VI - REACTIVITY DATA

STABILITY			CONDITIONS TO AVOID
	UNSTABLE		Open flames or high temperatures.
	STABLE	X	

INCOMPATIBILITY *(Materials to avoid)*
Alkali or alkaline earth metals-powdered Al, zinc, beryllium

HAZARDOUS DECOMPOSITION PRODUCTS
Hydrochloric and hydrofluoric acids - possible phosgene.

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Ventilate area - especially low places where heavy vapors might collect, remove open flames.

WASTE DISPOSAL METHOD
Evaporate outdoors.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)*
Use air mask in high concentrations.

VENTILATION	LOCAL EXHAUST	SPECIAL
	When large amounts are released	
	MECHANICAL *(General)*	OTHER
	Expecially in low places	

PROTECTIVE GLOVES	EYE PROTECTION
When handling liquid	When handling liquid

OTHER PROTECTIVE EQUIPMENT

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Store containers in a clean, dry area. Do not heat above 125°F.

OTHER PRECAUTIONS
For further information, see "Freon" Products Bulletin S-16.