

DuPont Suva (310) 575-5029

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10/26/97 21:17

ID:DUPOINT FLUOROCHEMICAL

FAX:1-802-452-1577

PAGE 1



DuPont Chemicals

2022FR

Revised 7-OCT-1996

Printed 31-OCT-1996

"FREON" 12

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

"FREON" is a registered trademark of DuPont.

Corporate MSDS Number DU001065

Formula CCl₂F₂

Tradenames and Synonyms

CC0112

Company Identification

MANUFACTURER/DISTRIBUTOR

DuPont
1007 Market Street
Wilmington, DE 19898

PHONE NUMBERS

Product Information 1-800-441-9442
Transport Emergency CHEMTREC: 1-800-424-9300
Medical Emergency 1-800-441-3637

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material

CAS Number

%

*

75-71-8

*METHANE, DICHLORODIFLUORO- ("FREON" 12)

100

* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

(Continued)



FIRE DEPARTMENT
9 METROTECH CENTER -- BROOKLYN, N.Y. 11201-3000/

To: Unit _____ **Date:** 03-21-0
From: Toxic Substance Unit, F.D. Hqs., 7th Floor
Subject: Hazardous Substance Reporting Information
Premises: GENUITY NEW YORK CITY
2 WORLD TRADE CTRN.

This package contains the following information:

I. Reporting Form Submission

- ☒ Original Submission
- ☐ Chemical Inventory has changed since last year due to:
 - ☐ The addition of **EXTREMELY HAZARDOUS SUBSTANCES (EHS)** on site
 - ☐ Increase in the quantities of hazardous substances on site
 - ☐ Decrease in the quantities of hazardous substance on site
- ☐ Chemical inventory has not changed since last year's report.

II. Hazard Information

- ☒ **EXTREMELY HAZARDOUS SUBSTANCES (EHS)** on site
- ☐ **LARGE QUANTITIES OF HAZARDOUS SUBSTANCES** site
- ☐ Hazardous Substances on site

III. Hazardous Substance Reporting Form

- ☒ Tier II Form / Facility Inventory Form
- ☒ Material Safety Data Sheets (MSDS). **Copies of MSDS can be obtained by calling the Toxic Substance Unit or at the facility.
- ☐ Previously forwarded MSDS not included in this package.

For any clarification of the above information, contact the Toxic Substance at (718) 999-0369 Fax: (718) 999-0034.

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ENER
man

VITON
TOXIC
EXC

ATTACHMENT A - IRRITANTS (continued)

<u>Product</u>	<u>Total Amount</u>
Lysol Disinfectant	216 oz
Mannville Pipe Insulation	33 rolls
Mobil Delvac 1310	990 gal.
Mobilgrease 28	48 oz.
Nickel Cadmium Industrial Batteries	7,820 lbs.
Pink Storm Lotion Handsoap	30 gal
Pneumatic/Hydraulic Seal 545	16 oz
Scales SYN-460	13 gal.
Silicone	336 oz.
Sunnyside Paint Thinner	½ gal.
Super Chemzyme III	21 gal.
Swish Aerosol	224 oz.
Tool Cool	144 oz
Turpolene #130	5 gal
Vitalube Cleaning Fluid	50 gal
WD-40	84 oz
Windex Glass Cleaner	2,304 oz



NEW YORK STATE DEPARTMENT OF STATE
OFFICE OF FIRE PREVENTION AND CONTROL

HAZARDOUS MATERIALS REPORT FORM
(General Municipal Law, § 209-u)

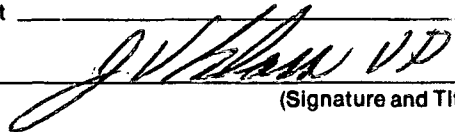
The information entered herein is essential to your local fire chief for the protection of your employees, the fire-fighters and citizens in the immediate area, and to reduce damage to your property in the event of a fire or an emergency.

Every fire insurance policyholder, engaged in commerce in this state, is required by law to report the presence of hazardous materials at their business address.

Failure to file in accordance with the provisions of section 209-u of the General Municipal Law could result in a fine.

A separate report is required annually for each business address.

WHEN COMPLETED, THIS FORM MUST BE SENT TO YOUR LOCAL FIRE DEPARTMENT.

Firm Name <u>Salomon Brothers Inc</u>		Hazardous Materials Location*	
Bus. Add. <u>Seven World Trade Center</u>		Street Add. Only <u>Same</u>	
City, State, Zip <u>New York, New York 10048</u>		Bldg. Name or No. <u>N/A</u>	
Tel. No. <u>(212) 783-7000</u>		City, State, Zip <u>N/A</u>	
Name of Emergency Contact <u>Jack Glass</u>		Policy Anniv. Date <u>July 1</u>	
 (Signature and Title of Person Completing Form)		Bus. Tel. <u>(212) 783-6252</u>	Home Tel. PII

*It is suggested that a separate form be filled out for each building that contains hazardous materials.

EXEMPTIONS

Requests for exemptions from this law must be made in writing, attached to this form, and filed annually with your local fire department not later than the anniversary date of your policy.

All exemptions approved shall expire on the next policy anniversary date.

Exemptions denied shall require that the insured file a completed hazardous materials report form within 15 days of denial.

FOR FIRE DEPARTMENT USE ONLY

Exemptions: Approved _____ Denied _____ Additional Information Needed _____

_____ (Date)	_____ (Signature of Fire Chief)
_____ (Fire Department Name and Address)	_____ (Print Name of Fire Chief)

ATTACHMENT A - IRRITANTS

<u>Product</u>	<u>Total Amount</u>
230 Caulk Silicone	
3M Carpet Stain Remover	56 oz.
3M Spray Buff Cleaner and Polish	2 gal.
3M Stainless Steel Cleaner	60 oz.
Acetylene	120 lbs.
Aerolex Aerosol	272 oz.
Ajax Cleaner with Oxygen Bleach	1,134 oz.
Alkyd Enamel	33 gal.
Ansulex Liquid Fire Suppressant	12 gal.
Ansulex Low pH Liquid Fire Suppressant	15 gal.
Antifreeze Ethylene Glycol Base GM	55 gal.
AutoKut Oil 130	1 qt.
Battery-Nickel Cadmium Battery	220 batteries
Biosperse 255 Microbiocide	55 gal.
Biosperse 257 Microbiocide	55 gal.
Brazing Flux - Stay Silver White	48 oz.
C1657 Rando Oil	550 gal.
Capture Pre-Spray Concentrate	1,560 oz.
Capture R Carpet Cleaner	198 lb.
Citgo Pacemaker 68	60 gal.
Conlux Turpolene #130	1 gal.
Diesel Fuel	12,000 gal.
DS67 Rug Spotter/Degreaser	80 oz.
DWS 1625	55 gal.
DWS 2040 Cooling Water Treatment	55 gal.
DWS 2818	55 gal.
Dyna Blue Cable Pulling Lubricant	2 gal.
E-Z 1,1,1 Trichloroethane	10 gal.
E-Z Alcohol	9 gal.
Enamelite 548 Jet Black	8 gal.
Enamelite 556 Skyline Blue	8 gal.
Fantastik	792 oz.
Fast Act	100 oz.
Flame-Safe Firestop	5 gal.
Flat Black Spray Paint	96 oz.
Floorguard 100 Series	10 gal.
Flush Out 624L	5 gal.
Freon 11	2,050 lbs.
Freon 12	10 lbs.
Freon 22	90 lb.
Fuji GR-FI Grandex Fixer	20 gal.
Fuji LD 835RA Developer/Replenisher	35 gal.
Hawg Wash	1 gal.
KBS Seal Bags	10 bags
Kodak Bleach Replenisher Process E-6, E-7 & E-6AR	10 gal.
Kodak Color Developer Replenisher, Process E-6 & E-6AR	76 ltrs.
Kodak Color Developer Replenisher, Process E-6 Part B	4 gal.
Kodak First Developer Replenisher Process E-6 & E-6AR	4 gal.

<u>Product</u>	<u>Total Amount</u>
Kodak Fixer & Replenisher E-6, E-7, E-6AR	256 oz.
Kodak Pre-Bleach & Replenisher, Process E-6, & D-6AR	4 gal.
Kodak Reversal Bath & Replenisher, Process E-6 & E-6AR	192 oz.
Lead Acid Batteries	5,650 gal.
Liquid Scale Dissolver	9 gal.
Loctite Pneumatic Hydraulic Oil 545	12 oz.
Lubricating Grease	48 oz.
Lysol Disinfectant	1,872 oz.
Mannville Pipe Insulation	1 roll
Metaquat Germaerdal Cleaner	½ gal.
Mobil Delvac 1310	990 gal.
Mr. Clean	528 oz.
No Sweat	96 oz.
On and On	5 gal.
Pink Storm Lotion Handsoap	45 gal.
Quick Clean	16 oz.
Sandlight Nylon Floor Pads	200 pads
Silicone	228 oz.
Stay Clean Liquid/Paste Flux	120 oz.
Sunnyside Paint Thinner	1 gal.
Super Chemzyme III	25 gal.
Super Hydraulic Oil	50 gal.
Teflon Pipe Sealant	80 oz.
Tool Cool	288 oz.
Turpolene # 130	1 gal.
Vitalube Cleaning Fluid	1 gal.
Windex Glass Cleaner	576 oz.
WPD 11-403 Cooling Water Treatment	5 gal.

TO: Admin. Unit E10, Batt. 1 Via: Division: 1
 FROM: Peter J. Ganci, Jr. EHS
 RE: Hazardous Materials Information Filing
 DATE: 6/3/99

Under Title III of the Superfund Amendments and Reauthorization Act ("SARA") of 1976, New York State General Municipal Law/Section 209-U, as well as local laws, facilities that store or handle certain hazardous substance within New York City must file relevant information concerning those substances with the Fire Department. The information filed with the Department is made up of Material Safety Data Sheets (MSDS), which are a manufacturer's summary of a product's potential hazards; Facility Inventory Forms (FIF), which were developed to fulfill Federal and City filing requirements; and form 209-U, which covers New York City filing requirements, Section 209-U of the General Municipal law.

The Bureau of Operation's Toxic Substance Unit is the recipient of the foregoing information. It is that Unit's responsibility to gather all the hazardous materials information filed with the Fire Department and ensure that each administrative unit, via the Division Command, receives the data that pertains to its district.

Enclosed is a copy of the hazardous substance filings, which pertain to your administrative district. Company Commanders should review this information and consider pre-incident planning items such as: entry into the CIDS program, target hazard program, facility drills,

Particular attention should be paid to the box marked "EHS", i.e., Extremely Hazardous Substances.

Units having any questions regarding this procedure should contact the Toxic Substance Bureau of Operations, at (718) 999-2125,26, Fax: (718) 999-0034.

Peter J. Ganci, Jr.
 Chief of Operations

PJG:SCM:dp



FIRE DEPARTMENT
9 METROTECH CENTER BROOKLYN, N.Y. 11201-3857

To: Unit E 10

Date: 6/3/99

From: Toxic Substance Unit, F.D. Hqs., 7th Floor

Subject: **Hazardous Substance Reporting Information**

Premises: Seven World Trade Ctr.
New York, N.Y. 10048

This package contains the following information:

I. Reporting Form Submission

- ☒ Original Submission
- ☐ Chemical Inventory has changed since last year due to:
 - ☐ The addition of **EXTREMELY HAZARDOUS SUBSTANCES (EHS)** on site
 - ☐ Increase in the quantities of hazardous substances on site
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- ☐ Chemical inventory has **not** changed since last year's report.

II. Hazard Information

- ☒ **EXTREMELY HAZARDOUS SUBSTANCES (EHS)** on site
- ☐ **LARGE QUANTITIES OF HAZARDOUS SUBSTANCES** on site
- ☐ Hazardous Substances on site

III. Hazardous Substance Reporting Form

- ☒ Tier II Form / Facility Inventory Form
- ☒ Material Safety Data Sheets (MSDS). **Copies of MSDS can be obtained by calling the Toxic Substance Unit or at the facility.
- ☐ Previously forwarded MSDS not included in this package.

For any clarification of the above information, contact the Toxic Substance Unit at (718) 999-2125,26 Fax: (718) 999-0034.

PJG:SCM:dp



NEW YORK STATE DEPARTMENT OF STATE
OFFICE OF FIRE PREVENTION AND CONTROL

HAZARDOUS MATERIALS REPORT FORM
(General Municipal Law, § 209-u)

E10
(B1, D1)

The information entered herein is essential to your local fire chief for the protection of your employees, the fire-fighters and citizens in the immediate area, and to reduce damage to your property in the event of a fire or an emergency.

Every fire insurance policyholder, engaged in commerce in this state, is required by law to report the presence of hazardous materials at their business address.

Failure to file in accordance with the provisions of section 209-u of the General Municipal Law could result in a fine.

A separate report is required annually for each business address.

WHEN COMPLETED, THIS FORM MUST BE SENT TO YOUR LOCAL FIRE DEPARTMENT.

Hazardous Materials Location*

Firm Name <u>Solomon Smith Barney</u>	Street Add. Only <u>Same</u>
Bus. Add. <u>Seven World Trade Center</u>	Bldg. Name or No. <u>N/A</u>
City, State, Zip <u>New York N.Y 10048</u>	City, State, Zip <u>N/A</u>
Tel. No. <u>(212)783-7000</u>	Policy Anniv. Date <u>July 1</u>
Name of Emergency Contact <u>Edward J Campbell</u>	Bus. Tel. <u>(212)783-6252</u> Home Tel. PII

Stacy A. Ly Assistant Property Manager
(Signature and Title of Person Completing Form)

*It is suggested that a separate form be filled out for each building that contains hazardous materials.

EXEMPTIONS

Requests for exemptions from this law must be made in writing, attached to this form, and filed annually with your local fire department not later than the anniversary date of your policy.

All exemptions approved shall expire on the next policy anniversary date.

Exemptions denied shall require that the insured file a completed hazardous materials report form within 15 days of denial.

FOR FIRE DEPARTMENT USE ONLY

Exemptions: Approved _____ Denied _____ Additional Information Needed _____

(Date)

(Signature of Fire Chief)

(Fire Department Name and Address)

(Print Name of Fire Chief)

VI Special Considerations/Remarks:

ATTACHMENT A - IRRITANTS

<u>Product</u>	<u>Total Amount</u>
Acetylene	60 lbs
Aerolex Aerosol	96 oz.
Ajax Cleaner with Oxygen Bleach	1,008 oz
Ansulex Low pH Liquid Fire Suppressant	15 gal.
Battery-Nickel Cadmium Battery	220 jars
Biosperse 255 Microbiocide	49 gal.
Biosperse 257 Microbiocide	49 gal.
Citgo Pacemaker 68	½ gal
Diesel Fuel	12,000 gal.
DWS 1625 Deposit Control Agent	39 gal.
DWS 2040 Cooling Water Treatment	39 gal.
Dyna Blue Cable Pulling Lubricant	2 quarts
E-Z 1,1,1 Trichloroethane	8 gal.
Enamelite 548 Jet Black	245 gal.
Fantastik	1,536 oz
Flame-Safe Firestop FS500/FST600 Series	10 gal.
Floorguard 100 Series	10 gal.
Freeze Ban	55 gal
Freon 11	1,400 lbs.
Freon 12	13.5 lbs.
Freon 502	20.4 lbs.
Hawg Wash	49 pints
KBS Seal Bags	10 bags
Kodak Color Developer Replenisher, Process E-6 & E-6AR	76 ltrs.
Kodak Color Developer Replenisher, Process E-6 Part B	4 gal.
Kodak Fixer & Replenisher E-6, E-7, E-6AR	256 oz.
Kodak Pre-Bleach & Replenisher, Process E-6, & D-6AR	4 gal.
Kodak Reversal Bath & Replenisher, Process E-6 & E-6AR	192 oz.
Lead Acid Batteries	21,228 lbs.
Liquid Seal Dissolver	9 gal.

ATTACHMENT A - IRRITANTS (continued)

<u>Product</u>	<u>Total Amount</u>
Lysol Disinfectant	216 oz
Mannville Pipe Insulation	33 rolls
Mobil Delvac 1310	990 gal.
Mobilgrease 28	48 oz.
Nickel Cadmium Industrial Batteries	7,820 lbs.
Pink Storm Lotion Handsoap	30 gal
Pneumatic/Hydraulic Seal 545	16 oz
Scales SYN-460	13 gal.
Silicone	336 oz.
Sunnyside Paint Thinner	½ gal.
Super Chemzyme III	21 gal.
Swish Aerosol	224 oz.
Tool Cool	144 oz
Turpolene #130	5 gal
Vitalube Cleaning Fluid	50 gal
WD-40	84 oz
Windex Glass Cleaner	2,304 oz

ATTACHMENT A - FLAMMABLE LIQUIDS

<u>Product</u>	<u>Total Amount</u>
Acrylic Enamel	80 oz
Chloroethane-NU	1 qt.
NC-123 Aerosol	336 oz.
Rubber Cement	12 oz.
Shine-Up	864 oz.
TEL-X Aerosol	352 oz.
E-Z Alcohol	4 gal.
DS67 Aerosol	352 oz.



NEW YORK STATE DEPARTMENT OF STATE
OFFICE OF FIRE PREVENTION AND CONTROL

HAZARDOUS MATERIALS REPORT FORM
(General Municipal Law, § 209-u)

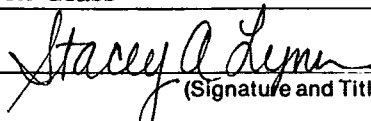
The information entered herein is essential to your local fire chief for the protection of your employees, the fire-fighters and citizens in the immediate area, and to reduce damage to your property in the event of a fire or an emergency.

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Failure to file in accordance with the provisions of section 209-u of the General Municipal Law could result in a fine.

A separate report is required annually for each business address.

WHEN COMPLETED, THIS FORM MUST BE SENT TO YOUR LOCAL FIRE DEPARTMENT.

Hazardous Materials Location*	
Firm Name <u>Salomon Brothers Inc</u>	Street Add. Only <u>Same</u>
Bus. Add. <u>Seven World Trade Center</u>	Bldg. Name or No. <u>n/a</u>
City, State, Zip <u>New York, NY 10048</u>	City, State, Zip <u>n/a</u>
Tel. No. <u>(212) 783-7000</u>	Policy Anniv. Date <u>July 1</u>
Name of Emergency Contact <u>Jack Glass</u>	Bus. Tel. <u>(212) 783-6252</u> Home Tel. PII
 (Signature and Title of Person Completing Form) <u>Analyst, Building Services.</u>	

*It is suggested that a separate form be filled out for each building that contains hazardous materials.

EXEMPTIONS

Requests for exemptions from this law must be made in writing, attached to this form, and filed annually with your local fire department not later than the anniversary date of your policy.

All exemptions approved shall expire on the next policy anniversary date.

Exemptions denied shall require that the insured file a completed hazardous materials report form within 15 days of denial.

FOR FIRE DEPARTMENT USE ONLY

Exemptions: Approved _____ Denied _____ Additional Information Needed _____

_____ (Date)	_____ (Signature of Fire Chief)
_____ (Fire Department Name and Address)	_____ (Print Name of Fire Chief)

VI Special Considerations/Remarks:

Instructions for Hazardous Material Listing

Identifying Symbol: This area identifies different classes of hazardous material. Most material will fall within one of these classes. If a particular material falls within two or more classes, it should be listed in each applicable class.

Two additional boxes are provided for material that does not fall within any class. These boxes may also be used if additional space is needed to further identify previously listed categories.

Amounts to be reported are shown in Table 1 below.

NOTE: SHIPPING AND PACKAGING LABELS MAY BE OF ASSISTANCE IN IDENTIFYING THE CLASS OF MATERIAL.

Hazardous Material Description and Proper Shipping Name

This area is reserved for the description and name of any hazardous material within a given class. If there is more than one material within a certain class, at a given location, then the most prevalent or most common should be used (indicate "most common").

Total Amount

List the total amount of reportable material within the given class. If the amounts vary from day to day, then the average amount should be listed.

Identifying Symbol	Hazardous Material Description and Proper Shipping Name	Total Amount
	Ethyl Chloride	60 gals.
	(most common)	

Special Considerations/Remarks

This area is reserved for the policyholder and the fire chief for making any notes or comments they feel are pertinent. Several examples are listed below:

1. Building has a sprinkler system.
2. Adjacent building is a school.
3. Guard dogs are on the premises from 6:00 p.m. to 6:00 a.m.
4. Hazardous material amounts may vary greatly from day to day.
5. Poor water supply.
6. Access to the building is poor.
7. Flammable liquid is stored in the same building as oxidizer.

Table 1

Amounts to be Reported

- | | |
|---|---|
| 1. Explosives and Blasting Agents - any amount | 8. Oxidizer - over 50 pounds |
| 2. Poison Gas - any amount | 9. Organic Peroxide - over 10 pounds |
| 3. Poison and Irritant - any amount | 10. Combustible Liquid - over 25 gallons inside a building and over 60 gallons outside a building |
| 4. Flammable Liquid - over 5 gallons inside a building and over 10 gallons outside a building | 11. Radioactive Material - any amount |
| 5. Flammable Solid - any amount | 12. Corrosive Material - over 55 gallons |
| 6. Flammable Gas - over 2,000 cubic feet at normal temperature | 13. Dangerous When Wet Material - any amount |
| 7. Nonflammable Gas - over 6,000 cubic feet at normal temperature | 14. Etiologic Material - any amount |

(OVER)

Hazardous Material Definitions

The following definitions have been abstracted from the Code of Federal Regulations, Title 49-Transportation, Parts 100 to 199. Refer to the referenced sections for complete details.

NOTE: Rulemaking proposals are outstanding or are contemplated concerning some of these definitions.

Hazardous Material - Means a substance or material which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety and property, when transported in commerce, and which has been so designated. (Sec. 171.8)

Multiple Hazards - A material meeting the definitions of more than one hazard class is classed according to the sequence given in Sec. 173.2.

HAZARD CLASS	DEFINITIONS
EXPLOSIVES	An Explosive - Any chemical compound, mixture or device, the primary or common purpose of which is to function by explosion, i.e., with substantially instantaneous release of gas and heat, unless such compound, mixture or device is otherwise specifically classified in Parts 170-189. (Sec. 173.50)
CLASS A EXPLOSIVE	Detonating or otherwise of maximum hazard. The nine types of Class A explosives are defined in Sec. 173.53.
CLASS B EXPLOSIVE	In general, function by rapid combustion rather than detonation and include some explosive devices such as special fireworks, flash powders, etc. Flammable hazard. (Sec. 173.88)
CLASS C EXPLOSIVE	Certain types of manufactured articles containing Class A or Class B explosives, or both, as components but in restricted quantities, and certain types of fireworks. Minimum hazard. (Sec. 173.100)
BLASTING AGENTS	A material designed for blasting which has been tested in accordance with Sec. 173.114a(b) and found to be so insensitive that there is very little probability of accidental initiation to explosion or of transition from deflagration to detonation. (Sec. 173.114a(a))
COMBUSTIBLE LIQUID	Any liquid having a flash point above 100°F. and below 200°F. as determined by tests listed in Sec. 173.115(d). Exceptions to this are found in Sec. 173.115(b).
CORROSIVE MATERIAL	Any liquid or solid that causes visible destruction of human skin tissue or a liquid that has a severe corrosion rate on steel. See Sec. 173.240(a) and (b) for details.
FLAMMABLE LIQUID	Any liquid having a flash point below 100°F. as determined by tests listed in Sec. 173.115(d). Exceptions are listed in Sec. 173.115(a).
COMPRESSED GAS	Compressed Gas - Any material or mixture having in the container a pressure exceeding 40 psia at 70°F., or a pressure exceeding 104 psia at 130°F.; or any liquid flammable material having a vapor pressure exceeding 40 psia at 100°F. (Sec. 173.300(a))
FLAMMABLE GAS	Any compressed gas meeting the requirements for lower flammability limit, flammability limit range, flame projection, or flame propagation criteria as specified in Sec. 173.300(b).
NONFLAMMABLE GAS	Any compressed gas other than a flammable compressed gas.
FLAMMABLE SOLID	Any solid material, other than an explosive, which is liable to cause fires through friction, retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious transportation hazard. (Sec. 173.150)
ORGANIC PEROXIDE	An organic compound containing the bivalent -O-O structure and which may be considered a derivative of hydrogen peroxide where one or more of the hydrogen atoms have been replaced by organic radicals must be classed as an organic peroxide unless... (See Sec. 173.151(a) for details)
OXIDIZER	A substance such as chlorate, permanganate, inorganic peroxide, or a nitrate, that yields oxygen readily to stimulate the combustion of organic matter. (See Sec. 173.151)
POISON A (Poison Gas)	Extremely Dangerous Poisons - Poisonous gases or liquids of such nature that a very small amount of the gas, or vapor of the liquid, mixed with air is dangerous to life . (Sec. 173.326)
POISON B (Poison)	Less Dangerous Poisons - Substances, liquids, or solids (including pastes and semi-solids), other than Class A or Irritating materials, which are known to be so toxic to man as to afford a hazard to health during transportation; or which, in the absence of adequate data on human toxicity, are presumed to be toxic to man . (Sec. 173.343)
IRRITATING MATERIAL	A liquid or solid substance which upon contact with fire or when exposed to air gives off dangerous or intensely irritating fumes, but not including any poisonous material, Class A . (Sec. 173.381)
ETIOLOGIC AGENT	An "etiologic agent" means a viable micro-organism, or its toxin which causes or may cause human disease. (Sec. 173.386) (Refer to the Department of Health, Education and Welfare Regulations, Title 42, CFR, Sec. 72.25(c) for details.)
RADIOACTIVE MATERIAL	Any material, or combination of materials, that spontaneously emits ionizing radiation, and having a specific activity greater than 0.002 microcuries per gram. (Sec. 173.389) NOTE: See Sec. 173.389(a) through (1) for details.
WATER REACTIVE MATERIAL (SOLID)	Means any solid substance (including sludges and pastes) which, by interaction with water, is likely to become spontaneously flammable or to give off flammable or toxic gases in dangerous quantities.

HAZARDS IDENTIFICATION

Potential Health Effects

Inhalation of high concentrations of vapor is harmful and may cause heart irregularities, unconsciousness, or death. Intentional misuse or deliberate inhalation may cause death without warning. Vapor reduces oxygen available for breathing and is heavier than air. Liquid contact can cause frostbite. May cause eye irritation.

HUMAN HEALTH EFFECTS:

Human health effects of overexposure by eye contact with the vapor may include eye irritation with discomfort, tearing, or blurring of vision. Skin contact with the liquid may cause frostbite. Inhalation of the vapors may cause temporary nervous system depression with anesthetic effects such as dizziness, headache, confusion, incoordination, and loss of consciousness; temporary alteration of the heart's electrical activity with irregular pulse, palpitations, or inadequate circulation, or the effects of exclusion of oxygen with grossly excessive exposures.

Individuals with preexisting diseases of the central nervous or cardiovascular system may have increased susceptibility to the toxicity of excessive exposures.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

First Aid

INHALATION

If high concentrations are inhaled, immediately remove to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SKIN CONTACT

In case of contact, flush skin with water. Treat for frostbite if necessary by gently warming affected area.

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION

Ingestion is not considered a potential route of exposure.

(Continued)

FIRST AID MEASURES(Continued)**Notes to Physicians**

Because of a possible disturbance of cardiac rhythm, catecholamine drugs, such as epinephrine, should only be used with special caution in situations of emergency life support.

FIRE FIGHTING MEASURES**Flammable Properties**

Flash Point	Will not burn
Flammable limits in Air, % by Volume	
LEL	Not applicable
UEL	Not applicable
Autoignition	>750 C (>1382 F)

Fire and Explosion Hazards:

Cylinders may rupture under fire conditions. Decomposition may occur.

Extinguishing Media

As appropriate for combustibles in area.

Fire Fighting Instructions

Use water spray or fog to cool containers. Self-contained breathing apparatus (SCBA) is required if cylinders rupture and contents are released under fire conditions.

ACCIDENTAL RELEASE MEASURES**Safeguards (Personnel)**

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Accidental Release Measures

Ventilate area, especially low or enclosed places where heavy vapors might collect. Remove open flames. Use self-contained breathing apparatus (SCBA) for large spills.

HANDLING AND STORAGE**Handling (Personnel)**

Use with sufficient ventilation to keep employee exposure below recommended limits.

Storage

Clean, dry area. Do not heat above 52 deg C (125 deg F).

(Continued)

EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering Controls**

Normal ventilation for standard manufacturing procedures is generally adequate. Local exhaust should be used when large amounts are released. Mechanical ventilation should be used in low or enclosed places.

Personal Protective Equipment

Impervious gloves and chemical splash goggles should be used when handling liquid. Under normal manufacturing conditions, no respiratory protection is required when using this product. Self-contained breathing apparatus (SCBA) is required if a large release occurs.

Exposure Guidelines**Applicable Exposure Limits**

METHANE, DICHLORODIFLUORO- ("FREON" 12)

PEL (OSHA) 1,000 ppm, 4,950 mg/m³, 8 Hr. TWA

TLV (ACGIH) 1,000 ppm, 4,950 mg/m³, 8 Hr. TWA, A4

AEL * (DuPont) None Established

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

PHYSICAL AND CHEMICAL PROPERTIES**Physical Data**

Boiling Point	-29.8 C (-21.6 F)
Vapor Pressure	94.5 psia at 25 deg C (77 deg F)
Vapor Density	4.26 (Air = 1.0) at 25 deg C (77 deg F)
% Volatiles	100 WT%
Solubility in Water	0.028 WT% @ 25 C (77 F) at 1 atm
pH	Neutral
Odor	Slight ethereal
Form	Liquified gas
Color	Clear, colorless
Density	1.315 g/cc at 25 deg C (77 deg F) - Liquid

STABILITY AND REACTIVITY**Chemical Stability**

Material is stable. However, avoid open flames and high temperatures.

Incompatibility with Other Materials

Incompatible with alkali or alkaline earth metals- powdered Al, Zn, Be, etc.

Polymerization

Polymerization will not occur.

(Continued)

STABILITY AND REACTIVITY (Continued)

Other Hazards

Decomposition : Decomposition products are hazardous. "FREON" 12 can be decomposed by high temperatures (open flames, glowing metal surfaces, etc.) forming hydrochloric and hydrofluoric acids, and possibly carbonyl halides.

TOXICOLOGICAL INFORMATION

Animal Data

Inhalation 30-minute LC50: 800,000 ppm in rats
Oral ALD : >1,000 mg/kg in rats

Effects in animals from single high exposure by inhalation include anesthesia and irregular heartbeat (cardiac arrhythmias). Repeated inhalation exposures produced altered respiratory function. Long-term studies showed no significant clinical, blood chemistry or pathological effects following repeated exposures. The effects in animals from long-term ingestion of this material include slight alterations in blood chemistry and body weight gain. No other clinical, biochemical or pathological signs of toxicity have been observed.

Tests in animals demonstrate no carcinogenic activity and no developmental or reproductive toxicity. The compound does not produce heritable genetic damage in animals or genetic damage in bacterial and mammalian cell cultures.

ECOLOGICAL INFORMATION

Ecotoxicological Information

AQUATIC TOXICITY:

"FREON" 12: 48 hour EC50 - Daphnia magna: 95 mg/L.

DISPOSAL CONSIDERATIONS

Waste Disposal

Comply with Federal, State, and local regulations.
Reclaim by distillation or remove to a permitted waste facility.

(Continued)

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TRANSPORTATION INFORMATION

Shipping Information

DOT/IMO
 Proper Shipping Name DICHLORODIFLUOROMETHANE
 Hazard Class 2.2
 UN No. 1028
 DOT/IMO Label NONFLAMMABLE GAS

Shipping Containers

Tank Cars.

Cylinders

Ton Tanks

Reportable Quantity : 5,000 lbs./2,270 kg.

REGULATORY INFORMATION

U.S. Federal Regulations

TSCA Inventory Status Reported/Included.

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Acute : Yes
 Chronic : No
 Fire : No
 Reactivity : No
 Pressure : Yes

HAZARDOUS CHEMICAL LISTS

SARA Extremely
 Hazardous Substance - No
 CERCLA Hazardous Substance - Yes
 SARA Toxic Chemical - See Components Section

Superfund reportable discharge = 5000 lb.

OTHER INFORMATION

NFPA, NPCA-HMIS

NPCA-HMIS Rating
 Health 1
 Flammability 0
 Reactivity 1

Personal Protection rating to be supplied by user depending on use conditions.

(Continued)

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The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS : DuPont Chemicals
Address : Engineering & Product Safety
> : P.O. Box 80709, Chestnut Run
> : Wilmington, DE 19880-0709
Telephone : (302) 999-4946

Indicates updated section.

End of MSDS