

3M General Offices  
3M Center  
St. Paul, Minnesota 55144-1000  
612/733-1110  
Duns No.: 00-617-3082

MATERIAL SAFETY  
DATA SHEET



DIVISION: HOME AND COMMERCIAL CARE DIVISION

TRADE NAME:

SCOTCHGARD(TM) BRAND PROTECTOR FOR FABRICS (CAT.NO. FC4101)

3M I.D. NUMBER: 70-0701-4043-2 70-0701-4050-7 70-0701-4079-6 70-0701-6111-5  
70-0701-8495-0 98-0211-0262-3 98-0211-0498-3

ISSUED: FEBRUARY 15, 1992  
SUPERSEDES: SEPTEMBER 30, 1991  
DOCUMENT: 10-2520-4

1. INGREDIENT	C.A.S. NO.	PERCENT	
1,1,1-TRICHLOROETHANE .....	71-55-6	90.0	- 94.0
CARBON DIOXIDE .....	124-38-9	3.0	- 4.0
METHYLAL .....	109-87-5	1.0	- 3.0
SEC-BUTYL ALCOHOL .....	78-92-2		< 2
TERT-BUTYL ALCOHOL .....	75-65-0		< 2
FLUORO-CHEMICAL POLYMER .....	TradeSecret	0.3	- 1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE .....	76-13-1	.1	- .5

NOTE: The trichloroethane is an aerosol grade.

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICAL OR CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:

- 1,1,1-TRICHLOROETHANE
- SEC-BUTYL ALCOHOL
- TERT-BUTYL ALCOHOL
- 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE

2. PHYSICAL DATA

BOILING POINT:..... ca. 175.00 F  
VAPOR PRESSURE:..... ca. 100.0000 mmHg  
MEASURED AT 20 DEGREES CENTIGRADE.  
VAPOR DENSITY: ..... ca. 4.55 Air = 1  
EVAPORATION RATE:..... ca. 0.40 Ether = 1  
SOLUBILITY IN WATER: ..... neglig.  
SP. GRAVITY:..... ca. 1.300 Water = 1  
PERCENT VOLATILE: ..... ca. 99.50 % by wt  
VOLATILE ORGANICS: ..... N/D  
VOC LESS H2O & EXEMPT SOLVENT ..... N/D  
pH: ..... N/A  
VISCOSITY: ..... N/D  
MELTING POINT..... N/D  
APPEARANCE AND ODOR: liquid in aerosol can, colorless, chlorinated solvent odor.

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... N/A  
FLAMMABLE LIMITS - LEL: ..... ca. 6.30 %  
FLAMMABLE LIMITS - UEL: ..... ca. 15.50 %  
AUTOIGNITION TEMPERATURE: ... N/D  
EXTINGUISHING MEDIA:  
WATER, CO2, FOAM, DRY CHEMICAL  
SPECIAL FIRE FIGHTING PROCEDURES:  
TREAT AS A PRESSURIZED CONTAINER.

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**3. FIRE AND EXPLOSION HAZARD DATA (continued)**

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UNUSUAL FIRE AND EXPLOSION HAZARDS:  
EXCESSIVE HEAT WILL CAUSE THE AEROSOL CANS TO EXPLODE.  
NFPA-HAZARD-CODES: HEALTH 3 FIRE 1 REACTIVITY 1  
UNUSUAL REACTION HAZARD: none

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**4. REACTIVITY DATA**

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STABILITY: Stable  
INCOMPATIBILITY - MATERIALS TO AVOID:  
NONE KNOWN  
HAZARDOUS POLYMERIZATION: Will Not Occur  
HAZARDOUS DECOMPOSITION PRODUCTS:  
EXPOSURE TO TEMPERATURES IN EXCESS OF 600F MAY PRODUCE TOXIC  
CHLORINATED BY-PRODUCTS.

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**5. ENVIRONMENTAL INFORMATION**

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SPILL RESPONSE:  
COLLECT SPILLED MATERIAL, OBSERVING PRECAUTIONS FROM OTHER SECTIONS.  
VENTILATE AREA. CLEAN UP RESIDUE. PLACE IN AN APPROVED METAL  
CONTAINER AND SEAL.

RECOMMENDED DISPOSAL:  
DO NOT PUNCTURE CANS OR BURN IN A HOUSEHOLD INCINERATOR. BURN IN A  
HEAVY-DUTY INCINERATOR CAPABLE OF HANDLING AEROSOL CANS. COMBUSTION  
PRODUCTS WILL INCLUDE HYDROCHLORIC ACID (HCL) AND HYDROFLUORIC ACID  
(HF). FOR SINGLE CAN DISPOSAL, BLEED CAN OF PROPELLANT IN A WELL  
VENTILATED AREA. EMPTY CAN MAY BE BURIED IN A SANITARY LANDFILL.  
SINCE REGULATIONS MAY VARY CONSULT APPLICABLE REGULATIONS OR  
AUTHORITIES BEFORE DISPOSAL. U.S. EPA HAZARDOUS WASTE NO.: NONE.

ENVIRONMENTAL DATA:  
DATA NOT DETERMINED. PACKAGED UNITS: 3M ID NOS. 98-0211-0498-3 AND  
98-0211-0377-9 DESCRIBE 12-OUNCE UNITS (FC-4101-12). 98-0211-0262-3  
AND 70-0701-8495-0 DESCRIBE A 16-OUNCE UNIT (FC-4101-16).  
70-0701-4079-6 DESCRIBES A 14-OUNCE UNIT (FC-4101-14). 70-0701-6111-5  
DESCRIBES A 14-OUNCE UNIT (FC-4106). 70-0701-4043-2 DESCRIBES A  
3-OUNCE UNIT (FC-4101-3). 70-0701-7426-6 DESCRIBES A 3-OUNCE UNIT  
(FC-4103). 70-0701-4050-7 DESCRIBES A 14-OUNCE UNIT (CAT.NO. 1412).

SARA HAZARD CLASS:  
FIRE HAZARD: No PRESSURE: Yes REACTIVITY: No ACUTE: Yes CHRONIC: Yes

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**6. SUGGESTED FIRST AID**

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EYE CONTACT:  
Immediately flush eyes with plenty of water. Continue for 10 minutes  
holding eyelids open. Call a physician.

SKIN CONTACT:  
Wash affected area with soap and water.

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## 6. SUGGESTED FIRST AID (continued)

### INHALATION:

If symptoms occur, remove person to fresh air. If symptoms continue, call a physician.

### IF SWALLOWED:

NOT APPLICABLE.

### OTHER FIRST AID:

NOTE TO PHYSICIANS: Exposure to 1,1,1-trichloroethane may increase myocardial irritability. Do not administer sympathomimetic drugs (i.e. adrenaline) unless absolutely necessary. No specific antidote for 1,1,1-trichloroethane. Supportive care. Treatment based on judgement of the physician in response to the patient.

## 7. PRECAUTIONARY INFORMATION

### OTHER PRECAUTIONARY INFORMATION:

DANGER: Vapor and/or airborne mist may be harmful. Avoid breathing vapors. Use only as directed. Intentional misuse by deliberately concentrating and inhaling or swallowing contents can be harmful or fatal. Product use without ventilation in a closed area may also be harmful or fatal. Use only in areas adequately ventilated to remove vapors and prevent vapor buildup. Maintain cross ventilation through use of fans and opening all doors and windows until the article is dry. Do not use in small rooms, bathrooms or closets. Use outdoors where possible.

If application requires more than one can, wait sixty (60) minutes between spraying each can. Do not spray into eyes, mouth, or onto skin. Keep spray and vapors away from heat sources and open flames such as ovens, furnaces, stoves and dryers when in operation. Keep small children and pets out of area until treatment has thoroughly dried. KEEP OUT OF REACH OF CHILDREN. NOTE: Once the product has dried, these warnings do not apply.

Do not puncture, incinerate or store above 120 degrees Fahrenheit (49 degrees Celsius).

INGREDIENTS	EXPOSURE LIMITS		TYPE	AUTH	SKIN*
	VALUE	UNIT			
1,1,1-TRICHLOROETHANE .....	350	ppm	TWA	ACGIH	
1,1,1-TRICHLOROETHANE .....	1910	mg/m <sup>3</sup>	TWA	ACGIH	
1,1,1-TRICHLOROETHANE .....	450	ppm	STEL	ACGIH	
1,1,1-TRICHLOROETHANE .....	2460	mg/m <sup>3</sup>	STEL	ACGIH	
1,1,1-TRICHLOROETHANE .....	350	ppm	TWA	OSHA	
1,1,1-TRICHLOROETHANE .....	1900	mg/m <sup>3</sup>	TWA	OSHA	
1,1,1-TRICHLOROETHANE .....	450	ppm	STEL	OSHA	
1,1,1-TRICHLOROETHANE .....	2450	mg/m <sup>3</sup>	STEL	OSHA	
CARBON DIOXIDE .....	5000	ppm	TWA	ACGIH	

Abbreviations: N/D - Not Determined N/A - Not Applicable

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7. PRECAUTIONARY INFORMATION (continued)

INGREDIENTS	EXPOSURE LIMITS		TYPE	AUTH	SKIN*
	VALUE	UNIT			
CARBON DIOXIDE .....	9000	mg/m3	TWA	ACGIH	
CARBON DIOXIDE .....	30000	ppm	STEL	ACGIH	
CARBON DIOXIDE .....	54000	mg/m3	STEL	ACGIH	
CARBON DIOXIDE .....	10000	ppm	TWA	OSHA	
CARBON DIOXIDE .....	18000	mg/m3	TWA	OSHA	
CARBON DIOXIDE .....	30000	ppm	STEL	OSHA	
CARBON DIOXIDE .....	54000	mg/m3	STEL	OSHA	
METHYLAL .....	1000	ppm	TWA	ACGIH	
METHYLAL .....	3110	mg/m3	TWA	ACGIH	
METHYLAL .....	1000	ppm	TWA	OSHA	
METHYLAL .....	3100	mg/m3	TWA	OSHA	
SEC-BUTYL ALCOHOL .....	100	ppm	TWA	ACGIH	
SEC-BUTYL ALCOHOL .....	303	mg/m3	TWA	ACGIH	
SEC-BUTYL ALCOHOL .....	100	ppm	TWA	OSHA	
SEC-BUTYL ALCOHOL .....	305	mg/m3	TWA	OSHA	
TERT-BUTYL ALCOHOL .....	100	ppm	TWA	ACGIH	
TERT-BUTYL ALCOHOL .....	303	mg/m3	TWA	ACGIH	
TERT-BUTYL ALCOHOL .....	150	ppm	STEL	ACGIH	
TERT-BUTYL ALCOHOL .....	455	mg/m3	STEL	ACGIH	
TERT-BUTYL ALCOHOL .....	100	ppm	TWA	OSHA	
TERT-BUTYL ALCOHOL .....	300	mg/m3	TWA	OSHA	
TERT-BUTYL ALCOHOL .....	150	ppm	STEL	OSHA	
TERT-BUTYL ALCOHOL .....	450	mg/m3	STEL	OSHA	
FLUORO-CHEMICAL POLYMER .....	NONE	NONE	NONE	NONE	
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE .....	1000	ppm	TWA	ACGIH	
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE .....	7670	mg/m3	TWA	ACGIH	
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE .....	1250	ppm	STEL	ACGIH	
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE .....	9590	mg/m3	STEL	ACGIH	
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE .....	1000	ppm	TWA	OSHA	
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE .....	7600	mg/m3	TWA	OSHA	
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE .....	1250	ppm	STEL	OSHA	
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE .....	9500	mg/m3	STEL	OSHA	

\* SKIN NOTATION: Listed substances indicated with "Y" under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

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**7. PRECAUTIONARY INFORMATION (CONTINUED)**

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**SOURCE OF EXPOSURE LIMIT DATA:**

- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration
- NONE: None Established

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**8. HEALTH HAZARD DATA**

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**EYE CONTACT:**

ANIMAL EYE IRRITATION STUDIES INDICATE THAT PRODUCT IS PRACTICALLY NON-IRRITATING TO THE EYES OF LABORATORY TEST ANIMALS.

**SKIN CONTACT:**

PRODUCT WAS FOUND TO BE NEITHER IRRITATING NOR SENSITIZING TO SKIN OF LABORATORY TEST ANIMALS.

**INHALATION:**

Overexposure to vapor or spray particles may be harmful. Symptoms of overexposure may include respiratory system irritation and temporary nervous system impairment such as dizziness, nausea, headache, giddiness and loss of consciousness. May cause mild liver and kidney injury and heart rhythm disturbances. Deliberate misuse by concentration and inhalation of vapors may be fatal / cause death.

**IF SWALLOWED:**

PRODUCT IS PRACTICALLY NON-TOXIC ORALLY.

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**SECTION CHANGE DATES**

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HEADING	SECTION CHANGED SINCE	SEPTEMBER 30, 1991 ISSUE
PRECAUT. INFO.	SECTION CHANGED SINCE	FEBRUARY 5, 1990 ISSUE

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The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this material under normal conditions. Any use of the material which is not in conformance with this Data Sheet or which involves using the material in combination with any other material or any other process is the responsibility of the user.