MATERIAL SAFETY 3M DATA SHEET 3M Center St. Paul, Minnesota 55144-1000 1-800-364-3577 or (651) 737-6501 (24 hours)

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DIVISION: ELECTRICAL PRODUCTS DIVISION TRADE NAME: KIT 82-BF1 (SCOTCHCAST 2130) U.P.C. Number: 00-54007-08309-2 ISSUED: July 17, 2001 SUPERSEDES: August 23, 1996 DOCUMENT: 10-5418-8

This product is a kit or a multipart product which consists of multiple, independently packaged components. An MSDS for each of these components is included. Please do not separate the component MSDSs from this cover page. The document numbers of the MSDSs for components of this product are: 10-2613-7

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

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MATERIAL SAFETY DATA SHEET	3M 3M Center St. Paul, Minnesota 55144-1000 1-800-364-3577 or (65	51) 737-6501 (2	24 hours	)	
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DIVISION: ELECTRICA		fr earning a pr		21 2011.	
TRADE NAME:		TD 0120			
ID NUMBER/U.P.C.:	LAME RETARDANT COMPOUN	ND 2130			
78-8025-2873-3	78-802	25-2874-1 -	_	_	
78-8046-9214-9	78-804	16-9215-6 -	_	-	
	-54007-31401-1 80-610				
	-54007-34359-2 80-610				
	80-610 80-611		-		
80-6112-0149-4	80-611 80-611	2-0150-2 00-5	54007-43	550-1	
	-54007-43551-8 80-611				
80-6112-0171-8					
ISSUED: May 02, 2001					
SUPERSEDES: April 16	, 2001				
DOCUMENT: 10-2613-7					
1. INGREDIENT		C.A.S. NO.			
Dowt A		Unimour		NT / 7	
1 1'-METHYLENEBIS(IS)	OCYANATOBENZENE)	26447-40-5	10	N/A - 20	
MDI-PPO-Hydrogenated		2011/ 10 5	ΞŪ	20	
		154517-54-1	10	- 20	
1,2-BENZENEDICARBOXY					
	D LINEAR	85507-79-5	1	- 8	
	ENEBIS[ISOCYANATO-,	39310-05-9	2	- 8	
Part B	• • • • • • • • • • • • • • • • • • • •	Unknown	2	- 0 N/A	
1,3-BUTADIENE, HOMOP		ommown		14/11	
IERMINAIED		69102-90-5	15	- 25	
DECABROMODIPHENYL ET		69102-90-5 1163-19-5	15 10	- 25 - 20	
DECABROMODIPHENYL ET 1,2-BENZENEDICARBOXY	HER LIC ACID, DIUNDECYL	1163-19-5	10	- 20	
DECABROMODIPHENYL ET 1,2-BENZENEDICARBOXY ESTER, BRANCHED AN	HER LIC ACID, DIUNDECYL D LINEAR	1163-19-5 85507-79-5	10 5	- 20 - 10	
DECABROMODIPHENYL ET 1,2-BENZENEDICARBOXY ESTER, BRANCHED AN GLYCOLS, POLYPROPYLE	HER LIC ACID, DIUNDECYL D LINEAR NE	1163-19-5 85507-79-5 25322-69-4	10 5 2	- 20 - 10 - 10	
DECABROMODIPHENYL ET 1,2-BENZENEDICARBOXY ESTER, BRANCHED AN GLYCOLS, POLYPROPYLE ANTIMONY TRIOXIDE	HER LIC ACID, DIUNDECYL D LINEAR NE	1163-19-5 85507-79-5 25322-69-4 1309-64-4	10 5 2 3	- 20 - 10 - 10 - 10	
DECABROMODIPHENYL ET 1,2-BENZENEDICARBOXY ESTER, BRANCHED AN GLYCOLS, POLYPROPYLE ANTIMONY TRIOXIDE N,N-DI(2-HYDROXYPROP	HER LIC ACID, DIUNDECYL D LINEAR NE YL)ANILINE	1163-19-5 85507-79-5 25322-69-4 1309-64-4 3077-13-2	10 5 2	- 20 - 10 - 10	
DECABROMODIPHENYL ET 1,2-BENZENEDICARBOXY ESTER, BRANCHED AN GLYCOLS, POLYPROPYLE ANTIMONY TRIOXIDE	HER LIC ACID, DIUNDECYL D LINEAR NE YL)ANILINE	1163-19-5 85507-79-5 25322-69-4 1309-64-4	10 5 2 3 2	- 20 - 10 - 10 - 10 - 6	
DECABROMODIPHENYL ET 1,2-BENZENEDICARBOXY ESTER, BRANCHED AM GLYCOLS, POLYPROPYLE ANTIMONY TRIOXIDE N,N-DI(2-HYDROXYPROP DIPROPYLENE GLYCOL ALUMINUM POTASSIUM S CASTOR OIL	HER LIC ACID, DIUNDECYL D LINEAR NE YL)ANILINE	1163-19-5 85507-79-5 25322-69-4 1309-64-4 3077-13-2 25265-71-8 12736-96-8 8001-79-4	10 5 2 3 2 1	- 20 - 10 - 10 - 10 - 6 - 10	

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\_\_\_\_\_ 1. INGREDIENT C.A.S. NO. PERCENT \_\_\_\_\_ CARBON BLACK..... 0.5 - 2 Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica..... 68909-20-6 0.1 - 2 HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER..... - 0.5 2082-79-3 0.1 0.05 - 0.1 280-57-9 TRIETHYLENEDIAMINE..... .02144 The components of this product are in compliance with the chemical notification requirements of TSCA. All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS. This product contains the following toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR Part 372: DECABROMODIPHENYL ETHER ANTIMONY TRIOXIDE ARSENIC \_\_\_\_\_ 2. PHYSICAL DATA \_\_\_\_\_ BOILING POINT: ..... N/A VAPOR PRESSURE: ..... N/A VAPOR DENSITY: ..... N/A EVAPORATION RATE:.... N/A SOLUBILITY IN WATER:.... Reacts SPECIFIC GRAVITY: ..... PRE.: 1.09 POL.: 1.29 PERCENT VOLATILE:.....0 pH:.....N/A VISCOSITY:..... PRE.:8p POL.:30p MELTING POINT:..... N/D APPEARANCE AND ODOR: PREPOLYMER: Hazy, amber liquid POLYOL: Black viscous liquid \_\_\_\_\_ 3. FIRE AND EXPLOSION HAZARD DATA \_\_\_\_\_ FLASH POINT:..... Both >290F Closed Cup FLAMMABLE LIMITS - LEL:..... N/D FLAMMABLE LIMITS - UEL:..... N/D AUTOIGNITION TEMPERATURE:..... N/D \_\_\_\_\_ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: SCOTCHCAST BRAND FLAME RETARDANT COMPOUND 2130 May 02, 2001 PAGE 3 \_\_\_\_\_ 3. FIRE AND EXPLOSION HAZARD DATA (continued) \_\_\_\_\_ EXTINGUISHING MEDIA: Carbon dioxide, Dry chemical, Foam SPECIAL FIRE FIGHTING PROCEDURES: Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head. UNUSUAL FIRE AND EXPLOSION HAZARDS: See Hazardous Decomposition section for products of combustion. \_\_\_\_\_ 4. REACTIVITY DATA \_\_\_\_\_ STABILITY: Stable INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID: Amines, Alcohols, Water. Reaction with water, alcohols and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup. HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur. HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Hydrogen Cyanide, Isocyanates. \_\_\_\_\_ 5. ENVIRONMENTAL INFORMATION \_\_\_\_\_ SPILL RESPONSE: Observe precautions from other sections. Ventilate area. Contain spill. Evacuate unprotected personnel from hazard area. Pour isocyanate decontaminant solution (90% water,8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Alternatively, pour water on spill and allow to react for more than 30 minutes. Cover with absorbent. Place in an approved drum, but do not seal the drum for 48 hours to avoid possible pressure buildup. Neutralize spill residue with decontaminant solution. RECOMMENDED DISPOSAL: Do not release to waterways or sewer. Incinerate in an industrial or commercial facility in the presence of a combustible material. \_\_\_\_\_ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: SCOTCHCAST BRAND FLAME RETARDANT COMPOUND 2130 May 02, 2001 PAGE 4 \_\_\_\_\_ 5. ENVIRONMENTAL INFORMATION (continued) \_\_\_\_\_ ENVIRONMENTAL DATA: Not determined. **REGULATORY INFORMATION:** Volatile Organic Compounds: N/D. VOC Less H2O & Exempt Solvents: N/D. Since regulations vary, consult applicable regulations or authorities before disposal. In the event of an uncontrolled release of this material, the user should determine if the release qualifies as a reportable quantity. U.S. EPA Hazardous Waste Number = D004 (Arsenic) EPCRA HAZARD CLASS: FIRE HAZARD: No PRESSURE: No REACTIVITY: Yes ACUTE: Yes CHRONIC: Yes \_\_\_\_\_ 6. SUGGESTED FIRST AID EYE CONTACT: Immediately flush eyes with large amounts of water. Get immediate medical attention. SKIN CONTACT: Flush skin with large amounts of water. If irritation persists, get medical attention. INHALATION: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention. IF SWALLOWED: Do not induce vomiting. Drink two glasses of water. Call a physician. \_\_\_\_\_ 7. PRECAUTIONARY INFORMATION \_\_\_\_\_ EYE PROTECTION: Avoid eye contact. Wear safety glasses with side shields. SKIN PROTECTION: Avoid prolonged or repeated skin contact. Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended: butyl rubber, nitrile rubber, polyvinyl alcohol, polyvinyl chloride. \_\_\_\_\_ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: SCOTCHCAST BRAND FLAME RETARDANT ( May 02, 2001	COMPOUNE	0 2130		P	AGE	5
7. PRECAUTIONARY INFORMATION (con	tinued)		· <b></b>			
RECOMMENDED VENTILATION: Provide sufficient ventilation to main recommended exposure limits. If exha- use appropriate respiratory protection	ust vent	issions be ilation i	elow s not ade	equate,		
RESPIRATORY PROTECTION: Avoid breathing of vapors. Select on approved respirators based on airborn and in accordance with OSHA regulation respirator.	e concer	tration of	f contam:			
PREVENTION OF ACCIDENTAL INGESTION: Do not ingest.						
RECOMMENDED STORAGE: Store in a cool place. Store away fr ventilated area. Keep out of the rea		-	ntainer :	in well	-	
<pre>FIRE AND EXPLOSION AVOIDANCE: Keep container tightly closed. Keep flame, and other sources of ignition. material. Do not heat under confinem HMIS HAZARD RATINGS: HEALTH: 3 FLAMMA PERSONAL PROTECTION</pre>	No smo ent. BILITY:	oking while	e handlin VITY: 1	ng this		
EXPOSURI		_			,	
INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKI	N*
Part A	NONE	NONE	NONE	NONE		
METHYLENEBIS(ISOCYANATOBENZENE)	0.005	PPM	TWA	ACGIH	Ι	
METHYLENEBIS(ISOCYANATOBENZENE) MDI-PPO-Hydrogenated polyButadiene	0.02	PPM	CEIL	OSHA		
<pre>polymer 1,2-BENZENEDICARBOXYLIC ACID, DIUNDECYL ESTER, BRANCHED AND</pre>	NONE	NONE	NONE	NONE		
LINEAR BENZENE, 1,1'-	NONE	NONE	NONE	NONE		
METHYLENEBIS[ISOCYANATO-, HOMOPOLYMER Part B 1,3-BUTADIENE, HOMOPOLYMER,	NONE NONE	NONE NONE	NONE NONE	NONE NONE		
HYDROXY-TERMINATED DECABROMODIPHENYL ETHER DECABROMODIPHENYL ETHER 1,2-BENZENEDICARBOXYLIC ACID, DIUNDECYL ESTER, BRANCHED AND	NONE 5 5	NONE MG/M3 MG/M3	NONE TWA TWA	NONE CMRG AIHA		

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	(001	ollindou,			
INGREDIENT		UNIT			KIN*
LINEAR	NONE		NONE	NONE	
GLYCOLS, POLYPROPYLENE		MG/M3	TWA	AIHA	
	AS PARTICU				
ANTIMONY TRIOXIDE	0.5	MG/M3	TWA	ACGIH	
	as S	b			
N,N-DI(2-HYDROXYPROPYL)ANILINE	NONE	NONE	NONE	NONE	
DIPROPYLENE GLYCOL	NONE	NONE	NONE	NONE	
ALUMINUM POTASSIUM SODIUM SILICATE	NONE	NONE	NONE	NONE	
CASTOR OIL	10	MG/M3	TWA	OSHA	
	AS MIST				
CARBON BLACK	3.5	MG/M3	TWA	ACGIH	
CARBON BLACK	3.5	MG/M3	TWA	OSHA	
CARBON BLACK	0.5	MG/M3	TWA	CMRG	
Silanamine, 1,1,1-trimethyl-N-					
(trimethylsilyl)-, hydrolysis					
products with silica	NONE	NONE	NONE	NONE	
HYDROCINNAMIC ACID, 3,5-DI-TERT-	1.01.2	110112	110112	110112	
BUTYL-4-HYDROXY-, OCTADECYL ESTER	NONE	NONE	NONE	NONE	
TRIETHYLENEDIAMINE	NONE	NONE	NONE	NONE	
ARSENIC	0.01	MG/M3	TWA	OSHA	
ARSENIC	0.01	MG/M3		ACGIH	
ARSENIC	0.01	MG/M3 MG/M3		OSHA	
ARSENIC		- , -		USHA	
	OSHA	ACTION LEV	ĽЬ		

EXPOSURE LIMITS (continued)

\* 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.

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- AIHA: American Industrial Hygiene Assoc. Workplace Environmental Exposure Level Guideline
- CMRG: Chemical Manufacturer Recommended Exposure Guidelines
- OSHA: Occupational Safety and Health Administration

- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

Mild Eye Irritation: signs/symptoms can include redness, swelling, pain, and tearing.

SKIN CONTACT:

Allergic Skin Reaction: signs/symptoms can include redness, swelling, blistering, and itching.

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MSDS: SCOTCHCAST BRAND FLAME RETARDANT COMPOUND 2130 May 02, 2001 PAGE 7 \_\_\_\_\_ 8. HEALTH HAZARD DATA (continued) \_\_\_\_\_ Mild Skin Irritation: signs/symptoms can include redness, swelling, and itching. INHALATION: Allergic Respiratory Reaction: signs/symptoms can include difficulty breathing, wheezing, tightness of chest, and respiratory failure. Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing. Vapors of the uncured product may cause irritation of the respiratory system. IF SWALLOWED: Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces. CANCER: WARNING: Contains a chemical which can cause cancer. (1309-64-4) (ACGIH suspected human carcinogen A2, IARC possible human carcingen 2B, Calif. Proposition 65) WARNING: Contains a chemical which can cause cancer. (1333-86-4) (IARC possible human carcinogen 2B) WARNING: Contains a chemical which can cause cancer. (7440-38-2) (NTP human carcinogen-Arsenic inorganic compounds, IARC human carcinogen 1, OSHA listed carcino gen, Calif. Proposition 65 - Inorganic Arsenic Compounds) \_\_\_\_\_ SECTION CHANGE DATES \_\_\_\_\_ HEADING SECTION CHANGED SINCE April 16, 2001 ISSUE

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