

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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This material safety data sheet (MSDS) is provided as a courtesy  
 in response to a customer request. This product is not regulated  
 under, and a MSDS is not required for this product by the OSHA  
 Hazard Communication Standard (29 CFR 1910.1200) because, when  
 used as recommended or under ordinary conditions, it should not  
 present a health and safety hazard. However, use or processing  
 of the product not in accordance with the product's  
 recommendations or not under ordinary conditions may affect the  
 performance of the product and may present potential health and  
 safety hazards.

DIVISION: INDUSTRIAL TAPE AND SPECIALTIES DIVISION

TRADE NAME:

Scotch brand (TM) No. 5414 Water Soluble Wave Solder Tape

ID NUMBER/U.P.C.:

70-0000-4121-3 00-21200-92405-7 70-0060-8784-8 00-21200-60705-9  
 70-0060-8786-3 00-21200-60707-3 70-0060-9100-6 00-21200-60830-8  
 70-0061-0210-0 00-21200-61335-7 70-0061-6404-3 00-21200-24258-8

ISSUED: April 04, 2001

SUPERSEDES: November 25, 1997

DOCUMENT: 07-6998-4

1. INGREDIENT	C.A.S. NO.	PERCENT	
POLY(VINYL ALCOHOL).....	9002-89-5	40	- 70
SYNTHETIC ADHESIVE.....	9003-39-8	10	- 30
SYNTHETIC ADHESIVE.....	25322-68-3	10	- 30

2. PHYSICAL DATA

BOILING POINT:..... N/A  
 VAPOR PRESSURE:..... nil  
 VAPOR DENSITY:..... N/A  
 EVAPORATION RATE:..... N/A  
 SOLUBILITY IN WATER:..... complete  
 SPECIFIC GRAVITY:..... ca. 1.47 Water=1  
 PERCENT VOLATILE:..... N/A  
 pH:..... ca. 7

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

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2. PHYSICAL DATA (continued)  
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VISCOSITY:..... N/A  
MELTING POINT:..... N/A

APPEARANCE AND ODOR:  
Roll of Tape, transparent

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3. FIRE AND EXPLOSION HAZARD DATA  
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FLASH POINT:..... > 350 F  
FLAMMABLE LIMITS - LEL:..... N/A  
FLAMMABLE LIMITS - UEL:..... N/A  
AUTOIGNITION TEMPERATURE:..... N/D

EXTINGUISHING MEDIA:  
Water spray, Carbon dioxide, Dry chemical, Alcohol-type foam,  
Universal-type 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. Water or foam may  
cause frothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS:  
No unusual fire or explosion hazards are anticipated.

NFPA HAZARD CODES: HEALTH: 0 FIRE: 1 REACTIVITY: 0  
UNUSUAL REACTION HAZARD: none

OSHA FIRE HAZARD CLASS: Not applicable

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4. REACTIVITY DATA  
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STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:  
None known.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:  
Carbon Monoxide and Carbon Dioxide.

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5. ENVIRONMENTAL INFORMATION  
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SPILL RESPONSE:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Extinguish all ignition sources. Collect spilled material. Clean up residue. Place in a closed container.

RECOMMENDED DISPOSAL:

Dispose of waste product in a sanitary landfill.

ENVIRONMENTAL DATA:

No data available.

REGULATORY INFORMATION:

Volatile Organic Compounds: N/A.  
VOC Less H<sub>2</sub>O & Exempt Solvents: N/A.

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.

EPCRA HAZARD CLASS:

FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: No CHRONIC: No

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6. SUGGESTED FIRST AID  
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EYE CONTACT:

No need for first aid is anticipated.

SKIN CONTACT:

No need for first aid is anticipated.

INHALATION:

No need for first aid is anticipated.

IF SWALLOWED:

No need for first aid is anticipated.

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7. PRECAUTIONARY INFORMATION  
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EYE PROTECTION:

Not applicable.

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7. PRECAUTIONARY INFORMATION (continued)  
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SKIN PROTECTION:

Avoid prolonged or repeated skin contact.

RECOMMENDED VENTILATION:

Not applicable.

RESPIRATORY PROTECTION:

Avoid breathing of thermal decomposition products.

PREVENTION OF ACCIDENTAL INGESTION:

Not applicable.

RECOMMENDED STORAGE:

Store away from heat. Keep container dry.

FIRE AND EXPLOSION AVOIDANCE:

Keep container tightly closed. Keep away from heat, sparks, open flame, and other sources of ignition.

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
POLY(VINYL ALCOHOL).....	5	MG/M3	TWA	CMRG	
		RESPIRABLE			
POLY(VINYL ALCOHOL).....	10	MG/M3	TWA	CMRG	
		AS TOTAL DUST			
SYNTHETIC ADHESIVE.....	5	MG/M3	TWA	CMRG	
		AS RESPIRABLE DUST			
SYNTHETIC ADHESIVE.....	10	MG/M3	TWA	CMRG	
		AS TOTAL DUST			
SYNTHETIC ADHESIVE.....	10	MG/M3	TWA	AIHA	
		AS PARTICULATE			

\* 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:

- AIHA: American Industrial Hygiene Assoc. Workplace Environmental Exposure Level Guideline
- CMRG: Chemical Manufacturer Recommended Exposure Guidelines

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8. HEALTH HAZARD DATA  
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EYE CONTACT:

Eye contact is not expected to occur during normal use of the product.

SKIN CONTACT:

No adverse health effects are expected from skin contact.

INHALATION:

Health effects from inhalation are not expected unless the product is over heated and decomposition occurs.

IF SWALLOWED:

Ingestion is not a likely route of exposure to this product.

No adverse health effects are expected from swallowing.

OTHER HEALTH HAZARD INFORMATION:

This product, when used under reasonable conditions or in accordance with the 3M directions for use, should not present a health and safety hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

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SECTION CHANGE DATES  
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HEADING

SECTION CHANGED SINCE November 25, 1997 ISSUE

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