MATERIAL SAFETY DATA SHEET

3M Center

St. Paul, Minnesota

55144-1000

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DIVISION: ENGINEERED ADHESIVES
TRADE NAME:
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3M(TM) Super 77(TM) Spray Adhesive
ID NUMBER/U.P.C.:
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62-4437-0921-7
                                                                                                                                            62-4437-0922-5 00-21200-25463-5
        62-4437-0925-8 00-21200-30091-2 62-4437-0926-6
       62-4437-0927-4 00-21200-25463-5 62-4437-0928-2 00-21200-25463-5 62-4437-0929-0 00-21200-25463-5 62-4437-0930-8 - -
                                                                          - - 62-4437-0933-2 00-21200-25463-5
        62-4437-0931-6
        62-4437-0934-0 00-21200-25463-5 62-4437-4026-1 00-21200-76098-3
        62-4437-4030-3 00-21200-76098-3 62-4437-4830-6 00-21200-85853-6
       62-4437-4835-5 00-21200-85853-6 62-4437-4840-5 00-21200-85853-6 62-4437-4925-4 00-21200-21210-9 62-4437-4926-2 00-21200-45160-7
        62-4437-4930-4 00-21200-21210-9 62-4437-4931-2 00-21200-39245-0
        62-4437-4933-8 00-21200-85846-8 62-4437-4935-3
        62 - 4437 - 4936 - 1 \quad 00 - 21200 - 21210 - 8 \quad 62 - 4437 - 4937 - 9 \quad 00 - 21200 - 89541 - 8
        62 - 4437 - 4938 - 7 \\ 00 - 21200 - 21210 - 9 \\ 62 - 4437 - 4939 - 5 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21200 - 21210 - 9 \\ 00 - 21200 - 21200 - 21210 - 9 \\ 00 - 21200 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21210 - 9 \\ 00 - 21200 - 21200 - 21210 - 9 \\ 00 - 21200 - 21200 - 21200 - 9 \\ 00 - 21200 - 21200 - 9 \\ 00 - 21200 - 21200 - 9 \\ 00 - 21200 - 21200 - 9 \\ 00 - 21200 - 21200 - 9 \\ 00 - 21200 - 21200 - 9 \\ 00 - 21200 - 21200 - 9 \\ 00 - 21200 - 21200 - 9 \\ 00 - 21200 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 \\ 00 - 21200 - 9 
62-4437-9999-4 - - CS-0406-2131-3
CS-0406-6984-1 - - CS-0406-7003-9
ISSUED: November 16, 2001
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SUPERSEDES: November 13, 2001

DOCUMENT: 11-4257-9

1. INGREDIENT C.A.S. NO. PERCENT

## NON-VOLATILE COMPONENTS - N.J. TRADE SECRET (T.S.) REGISTRY NO. 04499600-

Cherry (1.0.) Michaelle No. 04455000-			
5776P++	TradeSecret	20.0	- 30.0
CYCLOHEXANE	110-82-7	10.0	- 20.0
2-METHYLPENTANE	107-83-5	5.0	- 15.0
ISOBUTANE	75-28-5	7	- 13
PROPANE	74-98-6	7	- 13
DIMETHYL ETHER	115-10-6	7	- 13
3-METHYLPENTANE	96-14-0	3	- 7
2,3-DIMETHYLBUTANE	79-29-8	3	- 7
2,2-DIMETHYLBUTANE	75-83-2	1	- 5
HEXANE	110-54-3	.1	- 1

IN CASE OF EMERGENCY: THE NUMBERS AT THE TOP OF THIS PAGE PROVIDE 24 HOUR RESPONSE FROM ANY PHONE FOR ALL EMERGENCIES WITH THIS PRODUCT.

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\_\_\_\_\_\_ 1. INGREDIENT C.A.S. NO. PERCENT 

The components of this product are in compliance with the chemical notification requirements of TSCA.

++ rosin, synthetic polymer, resin and antioxidant. Not hazardous according to Canadian WHMIS criteria, Non-WHMIS controlled.

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: CYCLOHEXANE

HEXANE

#### 2. PHYSICAL DATA

BOILING POINT:..... Compressed gas VAPOR PRESSURE:..... Compressed gas VAPOR DENSITY:................ 2.97 Air=1 EVAPORATION RATE:..... 1.90 Ether=1 SOLUBILITY IN WATER:.... nil SPECIFIC GRAVITY:..... 0.697 Water=1 PERCENT VOLATILE:.... 75 % by wt pH:..... ca. 6.7 

### APPEARANCE AND ODOR:

liquid in aerosol, light cream colored, sweet/fruity odor.

## 3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:.... -42.00 F TCC FLAMMABLE LIMITS - LEL:..... ca. 1.5 % by vol FLAMMABLE LIMITS - UEL:..... ca. 8.6 % by vol

AUTOIGNITION TEMPERATURE: ..... N/D

# 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.

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3. FIRE AND EXPLOSION HAZARD DATA (continued)

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

NFPA HAZARD CODES: HEALTH: 2 FIRE: 4 REACTIVITY: 0 AEROSOL STORAGE: 3 UNUSUAL REACTION HAZARD: none

OSHA FIRE HAZARD CLASS: Class IA Flammable Liquid

4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide and Carbon Dioxide, Toxic Vapors, Gases or

#### 5. ENVIRONMENTAL INFORMATION

## SPILL RESPONSE:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Ventilate area. Extinguish all ignition sources. Cover with absorbent material. Collect using nonsparking tools. Place in a U.S. DOT-approved container.

## RECOMMENDED DISPOSAL:

Incinerate in a permitted hazardous waste incinerator in the presence of a combustible material. Facility must be capable of handling aerosol cans. Dispose of empty cans in a sanitary landfill. Dispose of waste product in a facility permitted to accept chemical waste.

RECYCLE EMPTY AEROSOL CONTAINERS WHERE AVAILABLE.

ENVIRONMENTAL DATA:

Not determined.

\_\_\_\_\_\_ 5. ENVIRONMENTAL INFORMATION (continued) REGILATORY INFORMATION: Volatile Organic Compounds: 75 % tested per SCAQMD method 305. Volatile Organic Compounds: ca. 4.4 lb/gal. VOC Less H2O & Exempt Solvents: 527 gms/liter tested per SCAQMD method Hazardous Air Pollutants: < 1 % by wt. Hazardous Air Pollutants: 0.04 #/# solids calculated. Since regulations vary, consult applicable regulations or authorities before disposal. U.S. EPA Hazardous Waste Number = D001 (Ignitable) OTHER ENVIRONMENTAL INFORMATION: HALOGEN ANALYSIS: The dry ingredients of 3M Super 77 Spray Adhesive were subjected to combustion in a Parr oxygen bomb. The decomposition products were analyzed by Ion Chromotographic analysis for halogen and sulfur content. Chlorine 0.05%; Fluorine <0.001%, Bromine <0.001%; Sulfur <0.035%. EPCRA HAZARD CLASS: FIRE HAZARD: Yes PRESSURE: Yes REACTIVITY: No 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: If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician. If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

7. PRECAUTIONARY INFORMATION

### EYE PROTECTION:

Avoid eye contact with vapor, spray, or mist. Wear safety glasses with side shields.

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7. PRECAUTIONARY INFORMATION (continued)

# SKIN PROTECTION:

Avoid prolonged or repeated skin contact.

#### RECOMMENDED VENTILATION:

Do not use in a confined area or areas with little or no air movement. If exhaust ventilation is not adequate, use appropriate respiratory protection. Provide ventilation adequate to control vapor concentrations below recommended exposure limits and/or control spray or mist.

#### RESPIRATORY PROTECTION:

Avoid breathing of vapors, mists or spray. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: half-mask organic vapor respirator.

## PREVENTION OF ACCIDENTAL INGESTION:

Do not ingest.

#### RECOMMENDED STORAGE:

Store at temperatures below 120 degrees F (49 degrees C). Store out of direct sunlight. Keep out of the reach of children.

## FIRE AND EXPLOSION AVOIDANCE:

Aerosol container contains flammable gas under pressure. Keep away from heat, sparks, open flame, and other sources of ignition. Extremely flammable liquid and vapor. Do not pierce or burn container, even after use. No smoking while handling this material. Avoid static discharge.

HMIS HAZARD RATINGS: HEALTH: 2 FLAMMABILITY: 4 REACTIVITY: 0
PERSONAL PROTECTION: X (See precautions, section 7.)

## EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH SKIN*
NON-VOLATILE COMPONENTS - N.J.				
TRADE SECRET (T.S.) REGISTRY NO.				
04499600-5776P++	NONE	NONE	NONE	NONE
CYCLOHEXANE	300	PPM	TWA	ACGIH
CYCLOHEXANE	300	PPM	TWA	OSHA
2-METHYLPENTANE	500	PPM	TWA	ACGIH
2-METHYLPENTANE	1000	PPM	STEL	ACGIH
ISOBUTANE	NONE	NONE	NONE	NONE
PROPANE	1000	PPM	TWA	OSHA.
PROPANE	2500	PPM	TWA	ACGIH
DIMETHYL ETHER	1000	PPM	TWA	CMRG
DIMETHYL ETHER	500	PPM	TWA	AIHA
3-METHYLPENTANE	500	PPM	TWA	ACGIH
				<del></del>

MSDS: 3M(TM) Super 77(TM) Spray Adhesive

November 16, 2001

EXPOSITER LIMITS

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INGREDIENT	VALUE	UNIT	TYPE	HTUA	SKIN*
3-METHYLPENTANE 2,3-DIMETHYLBUTANE 2,3-DIMETHYLBUTANE 2,2-DIMETHYLBUTANE 2,2-DIMETHYLBUTANE HEXANE HEXANE	1000 500 1000 500 1000 50	PPM	STEL TWA STEL TWA STEL TWA TWA	ACGIH ACGIH ACGIH ACGIH ACGIH ACGIH OSHAV	Y
HEXANE	500	PPM	TWA	OSHA	

(continued)

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\* 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
- OSHAV: Occupational Safety and Health Administration Vacated PEL.
   Vacated Permissible Exposure Limits (PEL) are enforced as
   the OSHA PEL in some states. Check with your local
   regulatory authority.
- NONE: None Established

# 8. HEALTH HAZARD DATA

EYE CONTACT:

Moderate Eye Irritation: signs/symptoms can include redness, swelling, pain, tearing, and hazy vision.

## SKIN CONTACT:

Mild Skin Irritation (after prolonged or repeated contact): signs/symptoms can include redness, swelling, and itching.

## INHALATION:

Intentional concentration and inhalation may be harmful or fatal.

Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

8. HEALTH HAZARD DATA (continued)

WHILE THE FOLLOWING EFFECTS ARE ASSOCIATED WITH ONE OR MORE OF THE INDIVIDUAL INGREDIENTS IN THIS PRODUCT AND ARE REQUIRED TO BE INCLUDED ON THE MSDS BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THEY ARE NOT EXPECTED EFFECTS DURING FORESEEABLE USE OF THIS PRODUCT.

Peripheral Neuropathy: signs/symptoms can include tingling of extremities, incoordination, numbness, weakness and tremors.

Prolonged or repeated exposure may cause:

Kidney Effects: signs/symptoms can include reduced urine volume, blood in urine and back pain.

Liver Effects: signs/symptoms can include yellow skin(jaundice) and tenderness of upper abdomen.

### IF SWALLOWED:

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

WHILE THE FOLLOWING EFFECTS ARE ASSOCIATED WITH ONE OR MORE OF THE INDIVIDUAL INGREDIENTS IN THIS PRODUCT AND ARE REQUIRED TO BE INCLUDED ON THE MSDS BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THEY ARE NOT EXPECTED EFFECTS DURING FORESEEABLE USE OF THIS PRODUCT.

Ingestion may cause:

Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces.

SECTION	CHANGE	DATES				

HEALTH HAZARD DATA SECTION CHANGED SINCE November 13, 2001 ISSUE

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