

MATERIAL SAFETY DATA SHEET

3M
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 St. Paul, Minnesota
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DIVISION: ADHESIVES DIVISION

TRADE NAME:

3M(TM) Super 77 Adhesive

ID NUMBER/U.P.C.:

62-4458-7530-5 00-21200-43798-4 62-4458-7535-4 - - -
 62-4458-8530-4 00-21200-43793-9 62-4458-9530-3 00-21200-43813-4

ISSUED: July 27, 1999

SUPERSEDES: INITIAL ISSUE

DOCUMENT: 09-2089-2

I. INGREDIENT	C.A.S. NO.	PERCENT
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NON-VOLATILE COMPONENTS - N.J. TRADE

SECRET (T.S.) REGISTRY NO. 04499600-

5776P.....	TradeSecret	30.0 - 40.0
CYCLOHEXANE.....	110-82-7	15 - 25
2-METHYLPENTANE.....	107-83-5	15 - 25
3-METHYLPENTANE.....	96-14-0	5 - 10
2,3-DIMETHYLBUTANE.....	79-29-8	5 - 10
2,2-DIMETHYLBUTANE.....	75-83-2	3 - 7
HEXANE.....	110-54-3	1 - 2

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.

Non hazardous according to WHMIS criteria. The components of this
 product are in compliance with the chemical notification requirements
 of TSCA.

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

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

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2. PHYSICAL DATA

BOILING POINT:..... 140 F
 VAPOR PRESSURE:..... 7 mmHg
 VAPOR DENSITY:..... > 1 Air=1
 EVAPORATION RATE:..... > 1 BuOAc=1
 SOLUBILITY IN WATER:..... nil

SPECIFIC GRAVITY:..... 0.777 Water=1
PERCENT VOLATILE:..... ca. 65 % by wt
pH:..... N/A
VISCOSITY:..... 200 - 5000 centipoise
MELTING POINT:..... N/D

APPEARANCE AND ODOR:
Liquid, clear, solvent odor

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... -20 F TCC
FLAMMABLE LIMITS - LEL:..... ca. 1.2 % by vol
FLAMMABLE LIMITS - UEL:..... ca. 7.3 % by vol
AUTOIGNITION TEMPERATURE:..... N/D

EXTINGUISHING MEDIA:

Water spray, Carbon dioxide, Dry chemical, Foam, Alcohol-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 may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. For leaks or spills which have not ignited, water spray can be used to disperse the flammable vapor and protect personnel attempting to stop the leak.

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: 1 FIRE: 4 REACTIVITY: 0
UNUSUAL REACTION HAZARD: none

OSHA FIRE HAZARD CLASS: Class IB Flammable Liquid

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4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:
Heat, Sparks and/or Flames.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon Monoxide and Carbon Dioxide, Hydrocarbons.

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. Contain spill. Cover with inorganic absorbent material. Collect using non-sparking tools. Clean up residue. Place in an approved metal container.

RECOMMENDED DISPOSAL:

Incinerate in a permitted hazardous waste incinerator. Do not dispose of in a sanitary landfill.

ENVIRONMENTAL DATA:

No data available.

REGULATORY INFORMATION:

Volatile Organic Compounds: ca. 493 gms/liter calculated per SCAQMD rule 443.1.

VOC Less H₂O & Exempt Solvents: ca. 493 gms/liter calculated per SCAQMD rule 443.1.

Hazardous Air Pollutants: ca. .03 #/# solids calculated.

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 = D001 (Ignitable)

EPCRA HAZARD CLASS:

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

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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:

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

SKIN PROTECTION:

Avoid skin contact. Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended: nitrile rubber, polyvinyl alcohol, fluoroelastomer (Viton).

RECOMMENDED VENTILATION:

Do not use in a confined area or areas with little or no air movement. Provide sufficient ventilation to maintain emissions below recommended exposure limits. 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 prolonged breathing of vapors. 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, full-face organic vapor respirator.

PREVENTION OF ACCIDENTAL INGESTION:

Do not ingest.

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7. PRECAUTIONARY INFORMATION (continued)

RECOMMENDED STORAGE:

Store in a cool place. Store away from heat. Keep container closed when not in use. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Keep container tightly closed. Keep away from heat, sparks, open flame, and other sources of ignition. Extremely flammable liquid and vapor. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. No smoking while handling this material. Do not spray near flame or incandescent material.

OTHER PRECAUTIONARY INFORMATION:

Not intended for consumer sale, or use.

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	
3-METHYLPENTANE.....	500	PPM	TWA	ACGIH	
3-METHYLPENTANE.....	1000	PPM	STEL	ACGIH	
2,3-DIMETHYLBUTANE.....	500	PPM	TWA	ACGIH	
2,3-DIMETHYLBUTANE.....	1000	PPM	STEL	ACGIH	
2,2-DIMETHYLBUTANE.....	500	PPM	TWA	ACGIH	
2,2-DIMETHYLBUTANE.....	1000	PPM	STEL	ACGIH	
HEXANE.....	50	PPM	TWA	ACGIH	Y
HEXANE.....	50	PPM	TWA	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.

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

EYE CONTACT:

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

SKIN CONTACT:

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

INHALATION:

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.

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.

Prolonged or repeated overexposure, above recommended guidelines, may cause:

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

IF SWALLOWED:

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

Aspiration Pneumonitis: signs/symptoms can include coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.

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