View Section : 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION 11-4257-9

Product Name:	**3M Super 77 Classic Spray Adhesive**
Manufacturer MSDS.:	11-4257-9
Manufacturer Name:	3M Company
Address:	3M Center St. Paul, MN 55144-1000 EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)
General Use:	Intended Use: Adhesive aerosol
Department:	Industrial Adhesives and Tapes Division
Revision Date:	04/07/09 Supercedes: 11/24/08
Trade Names:	3M(TM) Super 77 Classic Spray Adhesive

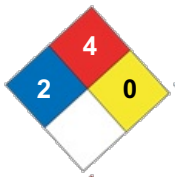
NFPA Hazard Classification:
Special Hazards: None
Aerosol Storage Code: 3

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification:
Protection: X - See PPE section.

Hazardous Material Identification System (HMIS(r)) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS(r) ratings are to be used with a fully implemented HMIS(r) program. HMIS(r) is a registered mark of the National Paint and Coatings Association (NPCA).

NFPA



HMIS

HEALTH	2
FIRE	4
REACTIVITY	0
PPE	X

Product Codes: 62-4437-4920-5, 62-4437-4930-4, 62-4437-4950-2, 62-4437-4921-3, 62-4437-4935-3, 62-4437-4955-1, UPC: 00-21200-96315-5

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SECTION 2 : COMPOSITION, INFORMATION ON INGREDIENTS 11-4257-9

Ingredient Name	CAS#	Ingredient Percent
NON-VOLATILE COMPONENTS (N.J. TRADE SECRET REGISTRY NO. 04499600-5776P) EC Index Number: 1	Trade Secret	15 - 40% by Weight
CYCLOHEXANE EC Index Number: 1	110-82-7	10 - 30% by Weight
2-METHYLPENTANE EC Index Number: 1	107-83-5	10 - 30% by Weight
ISOBUTANE EC Index Number: 1	75-28-5	7 - 13% by Weight
PROPANE EC Index Number: 1	74-98-6	7 - 13% by Weight

DIMETHYL ETHER		115-10-6	7 - 13% by Weight
EC Index Number:	1		
3-METHYLPENTANE		96-14-0	3 - 7% by Weight
EC Index Number:	1		
2,3-DIMETHYLBUTANE		79-29-8	1 - 5% by Weight
EC Index Number:	1		
2,2-DIMETHYLBUTANE		75-83-2	1 - 5% by Weight
EC Index Number:	1		
HEXANE		110-54-3	0.5 - 1.5% by Weight
EC Index Number:	1		

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SECTION 3 : HAZARDS IDENTIFICATION 11-4257-9

Physical State:	General Physical Form: Gas
Color:	Light cream colored
Odor:	Sweet/fruity odor
Physical Health Hazard:	Immediate health, physical, and environmental hazards: Closed containers exposed to heat from fire may build pressure and explode. Extremely flammable liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Aerosol container contains flammable material under pressure. May cause target organ effects. Contains a chemical or chemicals which can cause birth defects or other reproductive harm.
Environment Hazards:	POTENTIAL ENVIRONMENTAL EFFECTS: 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%.

Applies to All Ingredients :

Potential Health Effects:

Eye Contact:	Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
Skin Contact:	Prolonged or repeated exposure may cause: Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.
Inhalation:	Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Intentional concentration and inhalation may be harmful or fatal. Single exposure, above recommended guidelines, may cause: Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal. May be absorbed following inhalation and cause target organ effects.
Ingestion:	Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. May be absorbed following ingestion and cause target organ effects.
Target Organs:	Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness. Prolonged or repeated exposure may cause: Peripheral Neuropathy: Signs/symptoms may include tingling or numbness of the extremities, incoordination, weakness of the hands and feet, tremors and muscle atrophy. Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

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SECTION 4 : FIRST AID MEASURES 11-4257-9

Eye Contact:	Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.
Skin Contact:	Wash affected area with soap and water. If signs/symptoms develop, get medical attention.
Inhalation:	Remove person to fresh air. Get immediate medical attention.
Ingestion:	If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.
Note to Physicians:	Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

The above first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

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SECTION 5 : FIRE FIGHTING MEASURES 11-4257-9

Flash Point:	-42.00 deg F
Flash Point Method:	Tagliabue Closed Cup
Upper Flammable or Explosive Limit:	Approximately 8.6 % volume
Lower Flammable or Explosive Limit:	Approximately 1.5 % volume
Auto Ignition Temperature:	No Data Available
Flammability Class:	OSHA: Class IA Flammable Liquid
Extinguishing Media:	Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).
Fire Fighting Instructions:	Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).
Unusual Fire Hazards:	Closed containers exposed to heat from fire may build pressure and explode. Extremely flammable liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Aerosol container contains gas under pressure. Aerosol container contains flammable material under pressure. Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

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SECTION 6 : ACCIDENTAL RELEASE MEASURES 11-4257-9

Spill Cleanup Measures:	Accidental Release Measures: If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Contain spill. Cover spill area with a fire-extinguishing foam. An aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible. In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

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SECTION 7 : HANDLING and STORAGE 11-4257-9

Handling:	Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Do not pierce or burn container, even after use. No smoking while handling this material. Avoid breathing of vapors, mists or spray. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. Vapors may ignite explosively. May cause flash fire. Prevent build-up of vapors - open all windows and doors. Maintain vapor concentrations below recommended exposure limits. Use only with cross-ventilation. Without adequate ventilation, vapors may settle in low-lying areas. Keep away from heat, sparks, and open flame. Do not smoke or ignite matches, lighters, etc. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment.
Storage:	Store away from acids. Store away from heat. Store out of direct sunlight.

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SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION 11-4257-9

Engineering Controls:	Use with appropriate local exhaust ventilation. Use with functioning spray booth or local exhaust. Do not use in a confined area or areas with little or no air movement. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment. 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.
Skin Protection Description:	Avoid skin contact. Select and use gloves and/or protective clothing to prevent skin contact

	based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials. Gloves made from the following material(s) are recommended: Nitrile Rubber.
Eye/Face Protection:	Avoid eye contact with vapors, mists, or spray. The following eye protection(s) are recommended: Safety Glasses with side shields.
Respiratory Protection:	Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance. Organic vapor cartridges may have short service life.
Other Protective:	Prevention of Swallowing: Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Not applicable.
Exposure Limits:	Ingredient: DIMETHYL ETHER Authority: AIHA Type: TWA Limit: 1000 ppm Authority: CMRG Type: TWA Limit: 1000 ppm * Substance(s) 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. VAC Vacated PEL:Vacated Permissible Exposure Limits [PEL] are enforced as the OSHA PEL in some states. Check with your local regulatory agency. SOURCE OF EXPOSURE LIMIT DATA: ACGIH: American Conference of Governmental Industrial Hygienists CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

Ingredient Guidelines

Ingredient: CYCLOHEXANE	
Guideline Type:	ACGIH TLV-TWA
Guideline Information:	100 ppm
Guideline Type:	OSHA PEL-TWA
Guideline Information:	300 ppm Table Z-1
Ingredient: HEXANE	
Guideline Type:	ACGIH TLV-TWA
Guideline Information:	50 ppm Skin Notation*
Guideline Type:	OSHA Vacated PELs
Guideline Information:	50 ppm Table Z-1A
Guideline Type:	OSHA PEL-TWA
Guideline Information:	500 ppm Table Z-1A
Guideline Type:	ACGIH TLV-TWA
Guideline Information:	500 ppm (ISOMERS OTHER THAN N-HEXANE)
Guideline Type:	ACGIH TLV-STEL
Guideline Information:	1000 ppm (ISOMERS OTHER THAN N-HEXANE)
Ingredient: ISOBUTANE	
Guideline Type:	ACGIH TLV-TWA
Guideline Information:	1000 ppm
Ingredient: PROPANE	
Guideline Type:	ACGIH TLV-TWA
Guideline Information:	1000 ppm
Guideline Type:	OSHA PEL-TWA
Guideline Information:	1000 ppm Table Z-1

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SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES 11-4257-9

Physical State/Appearance:	General Physical Form: Gas
Color:	Light cream colored
Odor:	Sweet/fruity odor
pH:	Approximately 6.7 Units not avail. or not appl.
Vapor Density:	2.97 [Ref Std: AIR=1]
Flash Point:	-42.00 deg F
Flash Point Method:	Tagliabue Closed Cup
Auto Ignition Temperature:	No Data Available
Upper Explosive Limit:	Approximately 8.6 % volume
Lower Explosive Limit:	Approximately 1.5 % volume
Melting Point:	No Data Available
Solubility:	In Water: Nil
Specific Gravity:	0.697 [Ref Std: WATER=1]
Evaporation Point:	1.90 [Ref Std: ETHER=1]
Percent Volatile:	75 % weight
Volatile Organic Compound Content:	75 % [Test Method: tested per SCAQMD method 305]
Viscosity:	Not Applicable
VOC Less H2O & Exempt Solvents:	527 g/l [Test Method: tested per SCAQMD method 305]
	Hazardous Air Pollutants: < = 1 % weight

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SECTION 10 : STABILITY and REACTIVITY 11-4257-9

Chemical Stability:	Stable.
Conditions to Avoid:	Heat
Incompatibilities with Other Materials:	Materials to Avoid: Heat
Hazardous Polymerization:	Hazardous polymerization will not occur.
Hazardous Decomposition Products:	Substance: Aldehydes Condition: During Combustion Substance: Carbon monoxide Condition: During Combustion Substance: Carbon dioxide Condition: During Combustion Substance: Toxic Vapor, Gas, Particulate Condition: During Combustion

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SECTION 11 : TOXICOLOGICAL INFORMATION 11-4257-9

Toxicological Paragraph:	Please contact the address listed on the first section of the MSDS for Toxicological Information on this material and/or its components.

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SECTION 12 : ECOLOGICAL INFORMATION 11-4257-9

Ecotoxicity:	Not determined. CHEMICAL FATE INFORMATION: Not determined.

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SECTION 13 : DISPOSAL CONSIDERATIONS 11-4257-9

Waste Disposal:	Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility. The facility should be equipped to handle gaseous waste. Facility must be capable of handling aerosol cans. Dispose of empty product containers in a sanitary landfill. RECYCLE EMPTY AEROSOL CONTAINERS WHERE AVAILABLE.
EPA Waste Number:	EPA Hazardous Waste Number (RCRA): D001 (Ignitable) Since regulations vary, consult applicable regulations or authorities before disposal.

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SECTION 14 : TRANSPORT INFORMATION 11-4257-9

Transportation Information:	ID Number: 62-4437-4920-5 62-4437-4930-4, UPC: 00-21200-96315-5 62-4437-4950-2 62-4437-4921-3 62-4437-4935-3 62-4437-4955-1 Please contact the emergency numbers listed on the first section of the MSDS for Transportation Information for this material.

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SECTION 15 : REGULATORY INFORMATION 11-4257-9

Applies to All Ingredients :

TSCA 8(b): Inventory Status:	The components of this product are in compliance with the chemical notification requirements of TSCA.
Section 312 Hazard Category:	311/312 Hazard Categories:
Acute:	Yes
Chronic:	Yes
Fire:	Yes
Reactive:	No
Pressure:	Yes
OSHA 29 CFR 1200:	This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.
US Federal:	Contact 3M for more information.
State:	Contact 3M for more information.

Canada WHMIS:	WHMIS: Hazardous Additional Information: Synthetic polymer, resin and antioxidant. Not hazardous according to Canadian WHMIS criteria. Non-WHMIS controlled.
European Community Chemical Inventory Status:	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.
International Chemical Inventory Lists:	CHEMICAL INVENTORIES: Contact 3M for more information. INTERNATIONAL REGULATIONS: Contact 3M for more information.

CYCLOHEXANE :

Section 313 Toxic Release Form:	Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA): Ingredient: CYCLOHEXANE C.A.S. No: 110-82-7 % by Wt: 10 - 30

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SECTION 16 : ADDITIONAL INFORMATION 11-4257-9

HMIS:	
Health Hazard:	2
Fire Hazard:	4
Reactivity:	0
Personal Protection:	X
NFPA:	
Health:	2
Fire Hazard:	4
Reactivity:	0
MSDS Revision Date:	04/07/09 Supercedes: 11/24/08 Revision Changes: Copyright was modified. Section 14: ID Number(s) and/or UPC(s) Template 1 was modified. Section 15: TSCA section 12[b] text was deleted. Section 15: TSCA section 12[b] information was deleted.

Disclaimer:

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3M MSDSs are available at www.3M.com

NFPA Hazard Classification:
Special Hazards: None
Aerosol Storage Code: 3

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