

3M General Offices 3M Center St. Paul, MN 55144-1000 1-800-364-3577 or (651) 737-6501 (24 hours)

6/14/2011 9:57:26 AM

Material Safety Data Sheet

Purchase Order #: Customer Number: 1448166-00 WCE4310

> MSDS COORDINATOR WRS GROUP INC 624 TX CTRL PKWY WACO, TX 76712-6568 United States of America

Dear MSDS COORDINATOR

Enclosed is the Material Safety Data Sheet (MSDS) for the product that your company recently purchased from 3M

Please forward the attached MSDS to the individual in your organization responsible for implementing these regulations.

If you are a distributor and resell this product, OSHA and EPA require that you transmit this MSDS information to your customers at the time of first shipment or whenever you receive revised MSDSs from 3M.

3M MSDSs are available over the Internet at www.3m.com/MSDSSearch. You may also order a CD-ROM of 3M MSDSs by calling 1-800-364-3577.

3M is committed to meeting our customer requirements. Please contact your 3M customer service or sales representative if you have any questions. If you do not know whom to contact, please call the 3M Product Information Center at 1-800-364-3577.

If you are not currently receiving 3M MSDSs by e-mail and would like to do so, please contact our eMSDS Administrator at emsdsadmin@mmm.com or by calling 651-736-5875.



Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M(TM) Super 77 Classic Spray Adhesive

MANUFACTURER:

DIVISION: Industrial Adhesives and Tapes Division

ADDRESS: 3M Center

St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 08/04/10 Supercedes Date: 07/27/10

Document Group: 11-4257-9

Product Use:

Intended Use:

Adhesive aerosol

SECTION 2: INGREDIENTS

Ingredient	<u>C.A.S. No.</u>	% by Wt
N.J.T.S. Reg No. 04499600-5776P	Trade Secret	15 - 40
2,3-Dimethylbutane	79-29-8	10 - 20
3-Methylpentane	96-14-0	10 - 20
2-Methylpentane	107-83-5	10 - 20
Pentane	109-66-0	1 - 5
Cyclohexane	110-82-7	10 - 30
Isobutane	75-28-5	7 - 13
Propane	74-98-6	7 - 13
Dimethyl ether	115-10-6	7 - 13
Hexane	110-54-3	< 1.5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: light cream colored, sweet/fruity odor.

General Physical Form: Gas

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.

08/04/10

3.2 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 Organ Effects:

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.

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%.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

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

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Wash affected area with soap and water. If signs/symptoms develop, get medical attention. Skin Contact:

Get immediate medical attention. **Inhalation:** Remove person to fresh air.

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.

4.2 NOTE TO PHYSICIANS

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature

Flash Point

Flammable Limits - LEL

Flammable Limits - UEL

OSHA Flammability Classification:

No Data Available

-42.00 °F [Test Method: Tagliabue Closed Cup]

Approximately 1.5 % volume

Approximately 8.6 % volume

Class IA Flammable Liquid

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion 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. Acrosol 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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions

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.

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. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard.

Environmental procedures

Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Clean-up methods

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. 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. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue. Seal the container.

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.

SECTION 7: HANDLING AND STORAGE

7.1 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. Avoid contact with oxidizing agents. 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.

7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Store away from oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Use in an enclosed process area is recommended. Use with functioning spray booth or

local exhaust. Do not use in a confined area or areas with little or no air movement. Do not remain in area where available oxygen may be reduced. 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.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray.

The following eye protection(s) are recommended: Safety Glasses with side shields

8.2.2 Skin Protection

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

8.2.3 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.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Not applicable.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	Additional Information
Cyclohexane	ACGIH	TWA	100 ppm	
Cyclohexane	OSHA	TWA	1050 mg/m3	
Dimethyl ether	AIHA	TWA	1880 mg/m3	
Dimethyl ether	CMRG	TWA	1000 ppm	
Hexane	ACGIH	TWA	50 ppm	Skin Notation*
Hexane	OSHA	TWA	1800 mg/m3	
Pentane	ACGIH	TWA	600 ppm	
Pentane	OSHA	TWA	2950 mg/m3	
Propane	OSHA	TWA	1800 mg/m3	

^{*} 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.

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)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Odor, Color, Grade: General Physical Form:

Autoignition temperature

Flash Point

Flammable Limits - LEL Flammable Limits - UEL

Density

Vapor Density

Specific Gravity

pН

Melting point

Solubility in Water Evaporation rate

Hazardous Air Pollutants Volatile Organic Compounds Kow - Oct/Water partition coef

Percent volatile

VOC Less H2O & Exempt Solvents VOC Less H2O & Exempt Solvents VOC Less H2O & Exempt Solvents

Viscosity Solids Content light cream colored, sweet/fruity odor.

Gas

No Data Available

-42.00 °F [Test Method: Tagliabue Closed Cup]

Approximately 1.5 % volume Approximately 8.6 % volume

0.697 g/ml

2.97 [Ref Std: AIR=1]

0.697 [Ref Std: WATER=1]

Approximately 6.7 Units not avail. or not appl.

No Data Available

Nil

1.90 [*Ref Std:* ETHER=1]

<=1.4 % weight [Test Method: Calculated]

527 g/l [Details: EU VOC content]

No Data Available 75 % weight

527 g/l [Test Method: tested per SCAQMD method 305] 4.4 lb/gal [Test Method: tested per SCAQMD method 305] 84 % [Test Method: tested per SCAQMD method 305]

Not Applicable 13.5 - 17.8 %

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

Heat

10.2 Materials to avoid

Strong oxidizing agents

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance
Aldehydes
Carbon monoxide
Carbon dioxide
Toxic Vapor, Gas, Particulate

Condition
During Combustion
During Combustion
During Combustion
During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

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

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Vent cylinder or pressurized container in an operating exhaust hood or remote area.

A qualified person should adjust the release rate so gas concentration in ducts is less than 20% of the lower explosive limit (LEL). The LEL is the lowest concentration that can propagate (spread) a flame. A qualified person should adjust the release rate so gas concentration in ducts is less than 20% of the lower explosive limit (LEL). The LEL is the lowest concentration that can propagate (spread) a flame. Incinerate in a permitted hazardous waste incinerator. For quantities <10 lbs. (5 kg):

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 Hazardous Waste Number (RCRA): D001 (Ignitable)

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

 ID Number
 UPC
 ID Number
 UPC

 62-4437-4920-5
 62-4437-4921-3
 62-4437-4935-3
 62-4437-4935-3

 62-4437-4950-2
 62-4437-4955-1
 62-4437-4955-1

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

 Ingredient
 C.A.S. No
 % by Wt

 Cyclohexane
 110-82-7
 10 - 30

This material contains a chemical which requires export notification under TSCA Section 12[b]:

Ingredient (Category if applicable)	C.A.S. No	Regulation	Status
Pentane (Pentane)	109-66-0	Toxic Substances Control Act (TSCA) 4 Test	Applicable
		Rule Chemicals	
Pentane	109-66-0	Toxic Substances Control Act (TSCA) 4 Test	Applicable
		Rule Chemicals	• •

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL INVENTORIES

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.

Contact 3M for more information.

Additional Information: Synthetic polymer, resin and antioxidant. Not hazardous according to Canadian WHMIS criteria. Non-WHMIS controlled.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

WHMIS: Hazardous

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 2 Flammability: 4 Reactivity: 0 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

Health: 2 Flammability: 4 Reactivity: 0 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).

Revision Changes:

Section 14: Transportation legal text was modified.

Section 9: Property description for optional properties was modified.

Section 9: Density information was added.

Section 9: Property description for required properties was added.

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6/14/2011 9:57:26 AM

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> MSDS COORDINATOR WRS GROUP INC 624 TX CTRL PKWY WACO, TX 76712-6568 United States of America

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Please forward the attached MSDS to the individual in your organization responsible for implementing these regulations.

If you are a distributor and resell this product, OSHA and EPA require that you transmit this MSDS information to your customers at the time of first shipment or whenever you receive revised MSDSs from 3M.

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3MTM Scotch-WeldTM Industrial Plastic Adhesive 4475

MANUFACTURER: 3M

DIVISION: Industrial Adhesives and Tapes Division

ADDRESS: 3M Center

St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 08/02/10 Supercedes Date: 11/19/07

Document Group: 10-2966-9

Product Use:

Specific Use: Plastic Adhesive Intended Use: Industrial use

SECTION 2: INGREDIENTS

Ingredient	<u>C.A.S. No.</u>	<u>% by Wt</u>
Methyl Ethyl Ketone	78-93-3	50 - 60
Polyurethane Polymer	56815-45-3	15 - 25
Vinyl Chloride-Vinyl Acetate-Maleic Acid Polymer	9005-09-8	15 - 25
Epoxy Resin	25068-38-6	0.1 - 1

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: clear, ketone odor General Physical Form: Liquid

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. May cause allergic skin reaction. May cause target organ effects.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

Prolonged or repeated exposure may cause:

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

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 Organ Effects:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

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

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

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.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature 404 °C

Flash Point 16 °F [Test Method: Closed Cup] [Details: MEK]

Flammable Limits - LEL 1.8 % volume Flammable Limits - UEL 10.0 % volume

OSHA Flammability Classification: Class IB Flammable Liquid

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion 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.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions

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. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard.

Environmental procedures

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Clean-up methods

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. 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. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Seal the container.

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.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Contents may be under pressure, open carefully. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. No smoking while handling this material. Avoid breathing of vapors, mists or spray. Avoid static discharge. 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 crossventilation. 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. For industrial or professional use only. Avoid contact with oxidizing agents.

7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed. Store away from oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Provide appropriate local exhaust ventilation on open containers. If exhaust ventilation is not available, use appropriate respiratory protection.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray.

The following eye protection(s) are recommended: Safety Glasses with side shields Indirect Vented Goggles

8.2.2 Skin Protection

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: Butyl Rubber

Polyethylene/Ethylene Vinyl Alcohol

8.2.3 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 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.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Not applicable.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	Additional Information
Methyl Ethyl Ketone	ACGIH	TWA	200 ppm	
Methyl Ethyl Ketone	ACGIH	STEL	300 ppm	
Methyl Ethyl Ketone	OSHA	TWA	590 mg/m3	
STEARATES	ACGIH	TWA	10 mg/m3	

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)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Odor, Color, Grade: clear, ketone odor

General Physical Form: Liquid Autoignition temperature 404 °C

Flash Point 16 °F [Test Method: Closed Cup] [Details: MEK]

Flammable Limits - LEL 1.8 % volume Flammable Limits - UEL 10.0 % volume

Boiling point >=80 °C [Details: MEK] **Density** 0.95 g/ml

Vapor Density 2.50 [Ref Std: AlR=1]

Vapor Pressure <=91 mmHg [@ 77 °F]

Specific Gravity 0.95 [Ref Std: WATER=1]

pH Not Applicable
Melting point Not Applicable

Solubility in WaterSlight (less than 10%)Evaporation rate2.70 [Ref Std: WATER=1]

Hazardous Air Pollutants 0 % weight [Test Method: Calculated]
Volatile Organic Compounds <=554 g/l [Details: EU VOC content]

Kow - Oct/Water partition coef Percent volatileNo Data Available

55 - 65 % weight

VOC Less H2O & Exempt Solvents<=554 g/l [Test Method: calculated SCAQMD rule 443.1]</th>VOC Less H2O & Exempt Solvents<=4.62 lb/gal [Test Method: calculated SCAQMD rule 443.1]</th>

VOC Less H2O & Exempt Solvents <=58.2 % [Test Method: calculated per CARB title 2]

Viscosity 8500 centipoise [@ 73.4 °F]

Solids Content 20.4 - 40 % weight

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

Heat

Sparks and/or flames

10.2 Materials to avoid

Strong oxidizing agents

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance	<u>Condition</u>
Aldehydes	During Combustion
Hydrocarbons	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Chloride	During Combustion
Ketones	During Combustion
Oxides of Nitrogen	During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

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

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

Combustion products will include HCl. Facility must be capable of handling halogenated materials.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable), D035 (Methyl ethyl ketone)

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

MATERIALS	SAFETY DAT	A SHEET	3MTM Scotch-We	ald TM Industrial P	lastic Adhes	ive 4475 - 68#	02/10

ID Number(s):

62-4475-0635-3, 62-4475-2631-0, 62-4475-2635-1, 62-4475-6530-0, 62-4475-8530-8, 62-4475-8531-6, 62-4475-9530-7

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

 Ingredient
 C.A.S. No
 % by W

 Methyl Ethyl Ketone
 78-93-3
 50 - 60

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL INVENTORIES

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.

Contact 3M for more information.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 2 Flammability: 3 Reactivity: 0 Special Hazards: None

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.

Revision Changes:

Section 1: Product name was modified.

Copyright was modified.

Section 7: Handling information was modified.

Section 8: Prevention of swallowing information was modified.

Section 8: Eye/face protection information was modified.

Section 8: Skin protection - recommended gloves information was modified.

Section 8: Respiratory protection - recommended respirators information was modified.

Page Heading: Product name was modified.

Section 9: Property description for optional properties was modified.

Section 8: Exposure guidelines ingredient information was modified.

Section 9: Property description for required properties was added.

Section 6: Environmental procedures heading was added.

Section 6: Personal precautions heading was added.

Section 10.1 Conditions to avoid heading was added.

Section 10.2 Materials to avoid heading was added.

Section 6: Personal precautions information was added.

Section 6: Environmental procedures information was added.

Section 6: Methods for cleaning up information was added.

Section 10: Materials to avoid physical property was added.

Section 10: Conditions to avoid physical property was added.

Section 6: Clean-up methods heading was added.

Section 6: Release measures information was deleted.

Section 6: Release measures heading was deleted.

Section 10: Materials and conditions to avoid physical property was deleted.

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