



## Material Safety Data Sheet

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M™ Headliner & Fabric Adhesive PN 38808

**MANUFACTURER:** 3M

**DIVISION:** Automotive Aftermarket

**ADDRESS:** 3M Center, St. Paul, MN 55144-1000

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

**Issue Date:** 09/12/11

**Supersedes Date:** 09/21/10

**Document Group:** 27-9084-8

#### Product Use:

**Intended Use:** Automotive  
**Limitations on Use:** Not recommended for bonding polystyrene foam.  
**Specific Use:** Automotive trim, headliner and fabric adhesive.  
**General Use:** High strength adhesive for bonding automotive materials (carpeting, fabrics, plastics) to metal and other surfaces.

### SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
DIMETHYL ETHER	115-10-6	30 - 60
METHYL ACETATE	79-20-9	15 - 40
CYCLOHEXANE	110-82-7	7 - 13
BICYCLO[3.1.1]HEPT-2-ENE,2,6,6-TRIMETHYL-,POLYMER WITH 6,6-DIMETHYL-2-METHYLENEBICYCLO[3.1.1]HEPTANE	31393-98-3	5 - 10
1,1-DIFLUOROETHANE	75-37-6	1 - 5
BENZENE, 1-ETHENYL-4-METHYL-, POLYMER WITH (1-METHYLETHENYL)BENZENE	100199-62-0	1 - 5
NONVOLATILE COMPONENTS - TRADESECRET	Trade Secret	1 - 5
PETROLEUM DISTILLATE	64742-48-9	1 - 5
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	1 - 5
METHYL ALCOHOL	67-56-1	< 0.5

### SECTION 3: HAZARDS IDENTIFICATION

### 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Aerosol

**Odor, Color, Grade:** Liquid in aerosol, clear, sweet fruity odor

**General Physical Form:** Liquid

**Immediate health, physical, and environmental hazards:** Extremely flammable liquid and vapor. Aerosol container contains flammable material under pressure. 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. May cause target organ effects. Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

### 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.

**Inhalation:**

Intentional concentration and inhalation may be harmful or fatal.

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

Single exposure, above recommended guidelines, may cause:

Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

Prolonged or repeated exposure may cause:

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

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.

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

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

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

## 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

<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flash Point</b>	-40 °F [ <i>Test Method:</i> Tagliabue Closed Cup]
<b>Flammable Limits(LEL)</b>	<i>No Data Available</i>
<b>Flammable Limits(UEL)</b>	<i>No Data Available</i>
<b>OSHA Flammability Classification:</b>	Class IA 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. 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

### 6.1. Personal precautions, protective equipment and emergency procedures

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.

### 6.2. Environmental precautions

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 designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. 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. 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. Do not spray near flames or sources of ignition. Avoid breathing of vapors, mists or spray. Aerosol container contains flammable gas under pressure. Avoid static discharge. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. For industrial or professional use only. Do not breathe vapors.

### 7.2 STORAGE

Store away from heat. Store out of direct sunlight. Store away from areas where product may come into contact with food or pharmaceuticals.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Use in an enclosed process area is recommended. 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. Use in a well-ventilated area. 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

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#### 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: Neoprene

Nitrile Rubber

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#### 8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Do not breathe vapors.

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 and P95 particulate prefilters

. Select and use respiratory protection to prevent an inhalation exposure based on the results of an exposure assessment. Consult with

your respirator manufacturer for selection of appropriate types of respirators.

### 8.2.4 Prevention of Swallowing

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

## 8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
1,1-DIFLUOROETHANE	AIHA	TWA	2700 mg/m3	
1,1-DIFLUOROETHANE	CMRG	TWA	1000 ppm	
CYCLOHEXANE	ACGIH	TWA	100 ppm	
CYCLOHEXANE	OSHA	TWA	1050 mg/m3	
DIMETHYL ETHER	AIHA	TWA	1880 mg/m3	
DIMETHYL ETHER	CMRG	TWA	1000 ppm	
PETROLEUM DISTILLATE	3M	TWA	100 ppm	
PETROLEUM DISTILLATE	CMRG	TWA	300 ppm	
HYDROTREATED LIGHT PETROLEUM DISTILLATES	CMRG	TWA	300 ppm	
METHYL ACETATE	ACGIH	TWA	200 ppm	
METHYL ACETATE	ACGIH	STEL	250 ppm	
METHYL ACETATE	OSHA	TWA	610 mg/m3	
METHYL ALCOHOL	ACGIH	TWA	200 ppm	Skin Notation*
METHYL ALCOHOL	ACGIH	STEL	250 ppm	Skin Notation*
METHYL ALCOHOL	OSHA	TWA	260 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

<b>Specific Physical Form:</b>	Aerosol
<b>Odor, Color, Grade:</b>	Liquid in aerosol, clear, sweet fruity odor
<b>General Physical Form:</b>	Liquid
<b>Autoignition temperature</b>	No Data Available
<b>Flash Point</b>	-40 °F [Test Method: Tagliabue Closed Cup]
<b>Flammable Limits(LEL)</b>	No Data Available
<b>Flammable Limits(UEL)</b>	No Data Available
<b>Boiling Point</b>	No Data Available
<b>Density</b>	0.781 g/ml [Details: Refers to density of the liquid]
<b>Vapor Density</b>	2.97 [Ref Std: AIR=1]
<b>Vapor Pressure</b>	No Data Available
<b>Specific Gravity</b>	0.781 [Ref Std: WATER=1]
<b>pH</b>	Not Applicable
<b>Melting point</b>	No Data Available
<b>Solubility in Water</b>	Nil
<b>Evaporation rate</b>	1.90 [Ref Std: ETHER=1]
<b>Hazardous Air Pollutants</b>	0.284 % weight [Test Method: Calculated]

<b>Volatile Organic Compounds</b>	53.7 % weight [ <i>Test Method:</i> calculated per CARB title 2]
<b>Volatile Organic Compounds</b>	419 g/l [ <i>Test Method:</i> calculated SCAQMD rule 443.1]
<b>Kow - Oct/Water partition coef</b>	<i>No Data Available</i>
<b>Percent volatile</b>	53.62 % weight
<b>VOC Less H2O &amp; Exempt Solvents</b>	554 g/l [ <i>Test Method:</i> calculated SCAQMD rule 443.1]
<b>Viscosity</b>	<i>No Data Available</i>
<b>Conditions to avoid</b>	Heat
<b>Materials to avoid</b>	Strong oxidizing agents
<b>Materials to avoid</b>	Alkali and alkaline earth metals
<b>Materials to avoid</b>	

## 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  
Alkali and alkaline earth metals

**Hazardous Polymerization:** Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified
Toxic Vapor, Gas, Particulate	Not Specified

## 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. Facility must be capable of handling aerosol cans. Combustion products will include HF. Facility must be capable of handling halogenated materials. Dispose of empty product containers in a sanitary landfill.

**EPA Hazardous Waste Number (RCRA):** D001 (Ignitable)

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

## SECTION 14: TRANSPORT INFORMATION

**ID Number(s):**

60-4550-5177-5, 60-4550-5569-3

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):**

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
CYCLOHEXANE	110-82-7	7 - 13

### 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.

**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:** 2

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 16: Disclaimer (second paragraph) was modified.  
Section 3: Immediate physical hazard(s) was modified.  
Section 3: Potential effects from eye contact was modified.  
Section 3: Potential effects from skin contact information was modified.  
Section 3: Immediate other hazard(s) was modified.  
Section 15: Inventories information was modified.  
Section 9: Boiling point information was modified.  
Section 5: Flammable limits (UE) information was modified.  
Section 5: Flammable limits (LEL) information was modified.  
Section 9: Property description for optional properties was modified.  
Section 8: Respiratory protection - recommended respirators guide was modified.  
Section 9: Flammable limits (LEL) information was modified.  
Section 9: Flammable limits (UEL) information was modified.  
Section 14: ID Number(s) Template 1 was modified.  
Section 2: Ingredient table was modified.  
Section 8: Exposure guidelines ingredient information was modified.  
Section 6: 6.2. Environmental precautions heading was modified.  
Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was modified.  
Section 6: Personal precautions information was modified.  
Section 6: Environmental procedures information was modified.  
Section 6: Methods for cleaning up information was modified.  
Section 16: Web address was added.  
Section 1: Address was added.  
Copyright was added.  
Company logo was added.  
Telephone header was added.  
Company Telephone was added.  
Section 1: Emergency phone information was added.  
Section 1: Emergency phone information was deleted.  
Company Logo was deleted.  
Copyright was deleted.  
Section 16: Web address heading was deleted.  
Section 1: Address line 1 was deleted.  
Section 1: Address line 2 was deleted.  
Section 15: TSCA section 12[b] text was deleted.  
Section 15: TSCA section 12[b] information was deleted.

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