



## Material Safety Data Sheet

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M(TM) Hi-Strength Spray Adhesive 90 (aerosol)

**MANUFACTURER:** 3M

**DIVISION:** Construction And Home Improvement Prods

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

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

**Issue Date:** 12/21/2007

**Supersedes Date:** 06/22/2007

**Document Group:** 22-4028-1

**Product Use:**

Intended Use: Adhesive aerosol  
Specific Use: hi-strength aerosol adhesive

### SECTION 2: INGREDIENTS

| <u>Ingredient</u>                             | <u>C.A.S. No.</u> | <u>% by Wt</u> |
|-----------------------------------------------|-------------------|----------------|
| DIMETHYL ETHER                                | 115-10-6          | 35 - 45        |
| METHYL ACETATE                                | 79-20-9           | 25 - 35        |
| Non-volatile NJ Trade Secret # 04499600-6448P | Trade Secret      | 10 - 20        |
| CYCLOHEXANE                                   | 110-82-7          | 7 - 13         |
| PENTANE                                       | 109-66-0          | 1 - 5          |
| 1,1-DIFLUOROETHANE                            | 75-37-6           | 1 - 5          |
| METHYL ALCOHOL                                | 67-56-1           | < 0.35         |

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Aerosol

**Odor, Color, Grade:** clear, sweet fruity odor

**General Physical Form:** Gas

**Immediate health, physical, and environmental hazards:** Aerosol container contains flammable gas under pressure. 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.

## 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:

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

### Inhalation:

Intentional concentration and inhalation may be harmful or fatal.

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

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.

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:** 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. 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.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES

|                                   |                                               |
|-----------------------------------|-----------------------------------------------|
| Autoignition temperature          | No Data Available                             |
| Flash Point                       | -42.00 °F [Test Method: Tagliabue Closed Cup] |
| Flammable Limits - LEL            | No Data Available                             |
| Flammable Limits - UEL            | No Data Available                             |
| OSHA Flammability Classification: | 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:** 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

**Accidental Release Measures:** 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. 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. Close cylinder. If the cylinder can't be closed, place in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors. Collect the resulting residue containing solution. Dispose of collected material as soon as possible. Discharge the resulting residue containing solution to a municipal or industrial wastewater treatment facility.

**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. Aerosol container contains flammable gas under pressure. 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.

## 7.2 STORAGE

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

# 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. 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.

## 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

Not applicable. 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.

### 8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Consult the current 3M Respirator Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

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> | <u>Additional Information</u> |
|--------------------------|------------------|--------------------|--------------|-------------------------------|
| 1,1-DIFLUOROETHANE       | AIHA             | TWA                | 1000 ppm     | Table Z-1                     |
| 1,1-DIFLUOROETHANE       | CMRG             | TWA                | 1000 ppm     |                               |
| CYCLOHEXANE              | ACGIH            | TWA                | 100 ppm      |                               |
| CYCLOHEXANE              | OSHA             | TWA                | 300 ppm      |                               |
| DIMETHYL ETHER           | AIHA             | TWA                | 1000 ppm     |                               |
| DIMETHYL ETHER           | CMRG             | TWA                | 1000 ppm     | Table Z-1A                    |
| METHYL ACETATE           | ACGIH            | TWA                | 200 ppm      |                               |
| METHYL ACETATE           | ACGIH            | STEL               | 250 ppm      |                               |
| METHYL ACETATE           | OSHA             | TWA                | 200 ppm      |                               |
| METHYL ACETATE           | OSHA             | STEL               | 250 ppm      |                               |
| METHYL ALCOHOL           | ACGIH            | TWA                | 200 ppm      | Skin Notation*                |
| METHYL ALCOHOL           | ACGIH            | STEL               | 250 ppm      | Skin Notation*                |
| METHYL ALCOHOL           | OSHA             | TWA                | 200 ppm      | Skin Notation*; Table Z-1A    |
| METHYL ALCOHOL           | OSHA             | STEL               | 250 ppm      | Skin Notation*; Table Z-1A    |
| PENTANE                  | ACGIH            | TWA                | 600 ppm      | Table Z-1                     |
| PENTANE                  | OSHA             | TWA, Vacated       | 600 ppm      |                               |
| PENTANE                  | OSHA             | STEL, Vacated      | 750 ppm      |                               |
| PENTANE                  | OSHA             | TWA                | 1000 ppm     |                               |
| SILICATES (LESS THAN 1%) | OSHA             | TWA, as total dust | 0.1 fiber/cc |                               |

CRYSTALLINE SILICA) TALC  
CONTAINING ASBESTOS  
SILICATES (LESS THAN 1%  
CRYSTALLINE SILICA) TALC  
CONTAINING ASBESTOS

OSHA

STEL, as total dust

1 fiber/cc

Standard Appendix

\* 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)

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Specific Physical Form:**

Aerosol

**Odor, Color, Grade:**

clear, sweet fruity odor

**General Physical Form:**

Gas

**Autoignition temperature**

*No Data Available*

**Flash Point**

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

**Flammable Limits - LEL**

*No Data Available*

**Flammable Limits - UEL**

*No Data Available*

**Boiling point**

*Not Applicable*

**Vapor Density**

2.97 [Ref Std: AIR=1]

**Specific Gravity**

0.726 [Ref Std: WATER=1]

**pH**

*No Data Available*

**Melting point**

*Not Applicable*

**Solubility in Water**

Nil

**Evaporation rate**

1.90 [Ref Std: ETHER=1]

**Hazardous Air Pollutants**

<=.4 % weight [Test Method: Calculated]

**Volatile Organic Compounds**

54 %

**Percent volatile**

<=75 % weight

**VOC Less H2O & Exempt Solvents**

533 g/l

**Viscosity**

*Not Applicable*

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:** Heat

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

**Hazardous Decomposition or By-Products****Substance**

Carbon monoxide  
Carbon dioxide  
Irritant Vapors or Gases

**Condition**

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:** Incinerate uncured product in a permitted hazardous waste incinerator.

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

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

**SECTION 14: TRANSPORT INFORMATION**

**ID Number(s):**

70-0050-0054-5, 70-0714-1657-5, 70-0714-2446-2, 70-0714-7602-5, 70-0714-8005-0, 70-0714-9161-0

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 - Yes    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):

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

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

| <u>Ingredient (Category if applicable)</u> | <u>C.A.S. No</u> | <u>Regulation</u>                                         | <u>Status</u> |
|--------------------------------------------|------------------|-----------------------------------------------------------|---------------|
| PENTANE                                    | 109-66-0         | Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals | Applicable    |
| CYCLOHEXANE                                | 110-82-7         | Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals | Applicable    |
| METHYL ACETATE                             | 79-20-9          | Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals | Applicable    |

## 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.

|                                                                                                           |
|-----------------------------------------------------------------------------------------------------------|
| <b>This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.</b> |
|-----------------------------------------------------------------------------------------------------------|

## 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.

**Revision Changes:**

Section 14: ID Number Heading Template 1 was added.

Section 14: ID Number(s) Template 1 was added.

Section 2: Ingredient table was added.

Section 15: TSCA section 12[b] text was added.

Section 15: EPCRA 313 information was added.

Section 15: EPCRA 313 text was added.

Section 8: Exposure guidelines ingredient information was added.

Section 8: Exposure guidelines legend was added.

Section 8: Exposure guideline note was added.

Section 15: TSCA section 12[b] information was added.

Section 8: Exposure guidelines data source legend was added.

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