Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M(TM) Hi-Tack Spray Adhesive 76
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: 08/05/10
Supercedes Date: 06/10/10
Document Group: 16-5855-8

Product Use:
Intended Use: aerosol adhesive
Specific Use: aerosol adhesive

SECTION 2: INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl ether</td>
<td>115-10-6</td>
<td>35 - 45</td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>79-20-9</td>
<td>20 - 30</td>
</tr>
<tr>
<td>N.J.T.S Reg No. 04499600-6481P</td>
<td>Trade Secret</td>
<td>10 - 20</td>
</tr>
<tr>
<td>Cyclohexane</td>
<td>110-82-7</td>
<td>7 - 13</td>
</tr>
<tr>
<td>1,1-Difluoroethane</td>
<td>75-37-6</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Petroleum Naphtha</td>
<td>64742-48-9</td>
<td>0.5 - 1.5</td>
</tr>
<tr>
<td>Light petroleum distillates</td>
<td>64742-47-8</td>
<td>0.5 - 1.5</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Aerosol
Odor, Color, Grade: clear-amber, mild solvent 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.

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:
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.

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.

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.

### SECTION 5: FIRE FIGHTING MEASURES

#### 5.1 FLAMMABLE PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autoignition temperature</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>-40 °F [Test Method: Tagliabue Closed Cup]</td>
</tr>
<tr>
<td>Flammable Limits - LEL</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flammable Limits - UEL</td>
<td>No Data Available</td>
</tr>
</tbody>
</table>

#### 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

#### 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. 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. 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. 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 prolonged or repeated skin contact. Aerosol container contains flammable gas under pressure. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children.

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 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.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection
Avoid eye contact. 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 prolonged or repeated skin contact.

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.

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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Authority</th>
<th>Type</th>
<th>Limit</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1-Difluoroethane</td>
<td>AIHA</td>
<td>TWA</td>
<td>2700 mg/m³</td>
<td></td>
</tr>
<tr>
<td>1,1-Difluoroethane</td>
<td>CMRG</td>
<td>TWA</td>
<td>1000 ppm</td>
<td></td>
</tr>
<tr>
<td>Cyclohexane</td>
<td>ACGIH</td>
<td>TWA</td>
<td>100 ppm</td>
<td></td>
</tr>
<tr>
<td>Cyclohexane</td>
<td>OSHA</td>
<td>TWA</td>
<td>1050 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Dimethyl ether</td>
<td>AIHA</td>
<td>TWA</td>
<td>1880 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Dimethyl ether</td>
<td>CMRG</td>
<td>TWA</td>
<td>1000 ppm</td>
<td></td>
</tr>
<tr>
<td>Petroleum Naptha</td>
<td>3M</td>
<td>TWA</td>
<td>100 ppm</td>
<td></td>
</tr>
<tr>
<td>Petroleum Naptha</td>
<td>CMRG</td>
<td>TWA</td>
<td>300 ppm</td>
<td></td>
</tr>
<tr>
<td>Light petroleum distillates</td>
<td>CMRG</td>
<td>TWA</td>
<td>300 ppm</td>
<td></td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>ACGIH</td>
<td>TWA</td>
<td>200 ppm</td>
<td></td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>ACGIH</td>
<td>STEL</td>
<td>250 ppm</td>
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</tr>
<tr>
<td>Methyl acetate</td>
<td>OSHA</td>
<td>TWA</td>
<td>610 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

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-amber, mild solvent odor
General Physical Form: Gas
Autoignition temperature: No Data Available
Flash Point: -40 °F [Test Method: Tagliabue Closed Cup]
Flammable Limits - LEL: No Data Available
Flammable Limits - UEL: No Data Available
Density: 0.782 g/ml
Vapor Density: 2.97 [Ref Std: AIR=1]

Specific Gravity: 0.782 [Ref Std: WATER=1]

pH: No Data Available
Melting point: No Data Available

Solubility in Water: Nil
Evaporation rate: 1.90 [Ref Std: ETHER=1]
Hazardous Air Pollutants: 0 % weight [Test Method: Calculated]
Volatile Organic Compounds: <=428 g/l [Test Method: calculated SCAQMD rule 443.1] [Details: low solids less exempts]
Volatile Organic Compounds: <=3.57 lb/gal [Test Method: calculated SCAQMD rule 443.1] [Details: low solids less exempts]
Kow - Oct/Water partition coef: No Data Available
Percent volatile: Approximately 85 % weight
VOC Less H2O & Exempt Solvents: <=54.7 % [Test Method: calculated per CARB title 2]
Viscosity: Not Applicable
Solids Content: 7.1 %
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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aldehydes</td>
<td>During Combustion</td>
</tr>
<tr>
<td>Carbon monoxide</td>
<td>During Combustion</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>During Combustion</td>
</tr>
</tbody>
</table>

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. 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):**

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):

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclohexane</td>
<td>110-82-7</td>
<td>7 - 13</td>
</tr>
</tbody>
</table>

This material contains a chemical which requires export notification under TSCA Section 12(b):

<table>
<thead>
<tr>
<th>Ingredient (Category if applicable)</th>
<th>C.A.S. No</th>
<th>Regulation</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl acetate</td>
<td>79-20-9</td>
<td>Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals</td>
<td>Applicable</td>
</tr>
</tbody>
</table>

**STATE REGULATIONS**
Contact 3M for more information.

**CHEMICAL INVENTORIES**
Contact 3M for more information.

**INTERNATIONAL REGULATIONS**
Contact 3M for more information.
SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 2  Flammability: 4  Reactivity: 1  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: Transportation legal text was modified.
Section 9: Property description for optional properties was modified.
Section 2: Ingredient table was modified.
Section 9: Density information was added.
Section 9: Property description for required properties was added.

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