Material Safety Data Sheet

Copyright, 2005, 3M Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M(TM) Hi-Tack Spray Adhesive 76
MANUFACTURER: 3M
DIVISION: Industrial Adhesives and Tapes
ADDRESS: 3M Center
St. Paul, MN 55144-1000

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

Issue Date: 02/04/2005
Supercedes Date: 10/26/2003
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>NONVOLATILE COMPONENTS -N.J. TRADE SECRET REGISTRY 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:**
Prolonged or repeated exposure may cause:
- Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

**Inhalation:**
Upper 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.

Intentional concentration and inhalation may be harmful or fatal.

**Ingestion:**
Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, nausea, diarrhea and vomiting.

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:
- Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.
- Kidney Effects: Signs/symptoms may include reduced or absent urine production, increased serum creatinine, lower back pain, increased protein in urine, and increased blood urea nitrogen (BUN).

### 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.  If signs/symptoms develop, get medical attention.

If Swallowed:  Do not induce vomiting.  Give victim two glasses of water.  Never give anything by mouth to an unconscious person.  Get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</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>
<tr>
<td>OSHA Flammability Classification</td>
<td>Class IA Flammable Liquid</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

Accidental Release Measures:  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.  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.  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.

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
Gloves not normally required. 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>1000  ppm</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>300   ppm</td>
<td>Table Z-1</td>
</tr>
<tr>
<td>DIMETHYL ETHER</td>
<td>AIHA</td>
<td>TWA</td>
<td>1000  ppm</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 NAPHTHA</td>
<td>3M</td>
<td>TWA</td>
<td>100   ppm</td>
<td></td>
</tr>
<tr>
<td>PETROLEUM NAPHTHA</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>
<td></td>
</tr>
<tr>
<td>METHYL ACETATE</td>
<td>OSHA</td>
<td>TWA</td>
<td>200   ppm</td>
<td>Table Z-1A</td>
</tr>
<tr>
<td>METHYL ACETATE</td>
<td>OSHA</td>
<td>STEL</td>
<td>250   ppm</td>
<td>Table Z-1A</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
Flash Point -40 ºF [Test Method: Tagliabue Closed Cup]
Flammable Limits - LEL No Data Available
Flammable Limits - UEL No Data Available

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 <=.4 % weight [Test Method: Calculated] [Details: CONDITIONS: Methyl Alcohol]
Volatile Organic Compounds <=55 % [Test Method: calculated SCAQMD rule 443.1]
Percent volatile Approximately 85 % weight
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

<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. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility. Facility must be capable of handling aerosol cans. 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):
62-4943-4930-1, 62-4943-4935-0

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 - 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>CYCLOHEXANE</td>
<td>110-82-7</td>
<td>Toxic Substances Control Act (TSCA) 4 Test</td>
<td>Applicable</td>
</tr>
</tbody>
</table>
METHYL ACETATE  79-20-9  Rule Chemicals  Toxic Substances Control Act (TSCA) 4 Test  Applicable Rule Chemicals

STATE REGULATIONS
Contact 3M for more information.

CHEMICAL INVENTORIES
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: 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: NFPA hazard classification heading was modified.
Section 3: Other potential health effects heading was modified.
Copyright was modified.
Section 8: Exposure guidelines data source legend was modified.
Section 3: Immediate physical hazard(s) was modified.
Section 5: Fire fighting procedures information was modified.
Section 5: Unusual fire and explosion hazard information was modified.
Section 7: Handling information was modified.
Section 7: Storage information was modified.
Section 8: Engineering controls information was modified.
Section 8: Eye/face protection phrase was modified.
Section 8: Skin protection phrase was modified.
Section 15: 311/312 hazard categories heading was modified.
Section 15: International regulations information was modified.
Section 15: State regulations information was modified.
Section 15: US federal regulations information was modified.
Section 10: Hazardous polymerization heading was modified.
Section 2: Ingredient table was modified.
Section 15: TSCA section 12[b] text was modified.
Section 3: Other health effects information was modified.
Section 16: NFPA explanation was modified.
Section 15: Inventories information was modified.
Section 15: EPCRA 313 text was modified.
Section 12: Ecotoxicological information heading was modified.
Section 12: Chemical fate information heading was modified.
Section 8: Exposure guidelines ingredient information was modified.
Section 16: NFPA hazard classification for special hazards was modified.
Section 16: NFPA hazard classification for aerosol storage was modified.
Section 15: TSCA section 12[b] information was modified.
Section 12: Ecotoxicological phrase was modified.
Section 12: Chemical Fate phrase was modified.
Section 2: Ingredient phrase was added.
Section 8: Exposure guideline note was deleted.

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.

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