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Material Safety Data Sheet
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1 Product Identification

Tradename:
3M(TM) HI-STRENGTH SPRAY ADHESIVE 90 (AEROSOL)
Product ID:
62-4942-0926-5 62-4942-4925-3 62-4942-4928-7 62-4942-4930-3
62-4942-4935-2 62-4942-4938-6 CS-0406-7111-0 CS-0406-7139-1
CS-0406-6994-0 62-4942-4730-7
Intended Use of Product:
Aerosol Adhesive
Division:
INDUSTRIAL ADHESIVES AND TAPES

2 Composition/Information on Ingredients

Ingredient Name	CAS Number	Percentage
DIMETHYL ETHER	115-10-6	35 - 45
METHYL ACETATE	79-20-9	25 - 35
NONVOLATILE COMPONENTS	Trade Secret	10 - 20
CYCLOHEXANE	110-82-7	7 - 13
PENTANE	109-66-0	1 - 5
1,1-DIFLUOROETHANE	75-37-6	1 - 5

NOTE:
NON-VOLATILE COMPONENTS is a non-hazardous Trade Secret material according to WHMIS criteria.

Each percentage is expressed as the ratio of the weight of the ingredient to the weight of the controlled product.

3 Hazards Identification

Critical Hazards:

Extremely flammable liquid and vapour.
Flammable liquified gas.
Aerosol container contains flammable material under pressure.
Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
May be absorbed through skin and cause target organ effects.
May be absorbed following inhalation and cause target organ effects.
May be absorbed following ingestion and cause target organ effects.
See Sections 7 and 11 for further information.

4 First Aid Measures

Instructions for Eye Contact:

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

Instructions for Skin Contact:

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


Instructions for Inhalation:

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

Instructions for Ingestion:

Do not induce vomiting. Get immediate medical attention.

5 Fire Fighting Measures

Flash point:  -41.1 C TCC

Lower Explosive Limit (%): Not Available

Upper Explosive Limit (%): Not Available

Autoignition temperature: Not Available

Suitable Extinguishing Media:

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

Exposure Hazards during Fire:

Closed containers exposed to heat from fire may build pressure and explode. Vapours may travel long distances along the ground or floor to an ignition source and flash back.

Combustion Products from Fire:

Carbon monoxide - During Combustion;

Carbon dioxide - During Combustion;
Irritant Vapours or Gases - During Combustion;
Fire Fighting Procedures:
Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).
NFPA: Health 2
NFPA: Fire 4
NFPA: Reactivity 0
NFPA: Unusual Reaction Hazard none
Special Instructions:
Aerosol container contains flammable material under pressure.

6 Accidental Release Measures

Personal Precautions:
No data available.
Spill Response:
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. Dispose of collected material as soon as possible.
Methods for Disposal:
Discharge the resulting residue containing solution to a municipal or industrial wastewater treatment facility.

7 Handling and Storage

Storage Requirements:
No data available.
Incompatible Materials:
Store away from heat;
Store out of direct sunlight.
Store away from acids;
Ventilation:
No data available.
Fire Prevention:
Extremely flammable liquid and vapour.
Explosion Prevention:
Keep away from heat, sparks, open flame, pilot lights and other sources of ignition.

Flammable liquified gas.

Use Instructions:

Vapours may ignite explosively. May cause flash fire. Prevent build-up of vapours - open all windows and doors. Maintain vapour concentrations below recommended exposure limits. Use only with cross-ventilation. Without adequate ventilation, vapours may settle in low-lying areas. Keep away from heat, sparks, and open flame. Do not smoke or ignite matches, lighters, etc.

8 Exposure Controls/Personal Protection

Personal Protection

Eye Protection:

Avoid eye contact.

Avoid eye contact with vapours, mists, or spray.

The following should be worn alone or in combination, as appropriate, to prevent eye contact:

Safety glasses with side shields

Hand Protection:

Gloves not normally required.

Avoid skin contact.

Skin Protection:

Avoid skin contact.

Avoid prolonged or repeated skin contact.

Respiratory Protection:

Consult the current 3M Respirator Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

Avoid breathing of vapours, mists or spray.

Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations:

Half facepiece or fullface air-purifying respirator with organic vapor cartridges.

Ingestion (Prevention):

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

Keep out of the reach of children.

Recommended Ventilation:

Use with appropriate local exhaust ventilation.

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, vapour, or spray. If ventilation is not adequate, use respiratory protection equipment.

Ingredient Exposure Data

DIMETHYL ETHER (115-10-6)	
LD50 (rat, oral)	No data available.
LC50 (rat, inhalation/4 hours)	164000 ppm
Exposure Limits	
CMRG: TWA 1000 ppm	
AIHA: TWA 1000 ppm	
METHYL ACETATE (79-20-9)	
LD50 (rat, oral)	> 5 g/kg
LD50 (dermal, rabbit)	> 5 g/kg
LC50 (rat, inhalation/4 hours)	No data available.
Exposure Limits	
ACGIH: TWA 200 ppm	
ACGIH: STEL 250 ppm	
NONVOLATILE COMPONENTS (Trade Secret)	
Specific Ingredient Data	
No data available. No data available.	
LD50 (rat, oral)	No data available.
LC50 (rat, inhalation/4 hours)	No data available.
Exposure Limits	
No data available.	
CYCLOHEXANE (110-82-7)	
LD50 (rat, oral)	12,705 mg/kg
LC50 (rat, inhalation/4 hours)	No data available.
Exposure Limits	
ACGIH: TWA 100 ppm	
PENTANE (109-66-0)	
LD50 (rat, oral)	> 2000 mg/kg
LC50 (rat, inhalation/4 hours)	◆ 364 g/m3
Exposure Limits	
ACGIH: TWA 600 ppm	
1,1-DIFLUOROETHANE (75-37-6)	
LD50 (rat, oral)	No data available.
LC50 (rat, inhalation/4 hours)	64,000 ppm
Exposure Limits	
CMRG: TWA 1000 ppm	
AIHA: TWA 1000 ppm	
AIHA: TWA 2700 mg/m3	

9 Physical and Chemical Properties

Physical form,Color,Odour:	Aerosol; Gas; Clear; sweet, fruity odour.
Odour Threshold:	No data available.
pH:	Not Available
Boiling point/boiling range:	Not applicable
Melting point/melting range:	Not applicable
Vapour pressure:	Compressed Gas;
Water Solubility:	Nil
Specific gravity:	◆ 0.726 Water=1

Vapour density:	◆ 2.97 Air=1
Volatile organic compounds:	◆ 54 %
Evaporation rate:	◆ 1.9 Ether=1
Viscosity:	Not applicable
Percent Volatile:	<= 75 % by weight

10 Stability and Reactivity

Conditions to Avoid:

Heat;
Store out of direct sunlight.

Materials to Avoid:

Store away from acids;

Hazardous Decomposition:

Carbon monoxide - During Combustion;
Carbon dioxide - During Combustion;
Irritant Vapours or Gases - During Combustion;

Stability and Reactivity:

Stable. Hazardous polymerization will not occur.

11 Toxicological Information

Effects from Eye Contact:

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

Effects from Skin Contact:

May be absorbed through skin and cause target organ effects.
Prolonged or repeated exposure may cause: Mild Skin Irritation:
Signs/symptoms can include localized redness, swelling, and itching.

Effects from 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.

Effects from Ingestion:

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

May be absorbed following ingestion and cause target organ effects.

Sensitization Information:

No data available.

Carcinogenicity:

No data available.

Mutagenicity:

No data available.

Reproductive Effects:

No data available.

Component Based Information:

No data available.

Product Based Information:

No data available.

Other Effects & Information:

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, above recommended guidelines, 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).

12 Ecological Information

Environmental Data:

Ecotoxicity Data:

Not determined.

Ecofate Data:

Not determined.

13 Disposal Considerations

Product as Sold:

Incinerate in a permitted hazardous waste incinerator. The facility should be equipped to handle gaseous waste. Recycle empty aerosol containers where available.

Product Packaging:

No data available.

Special Instructions:

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

14 Transport Information

Transportation of Dangerous Goods

TDG Classification:

Consumer Commodity

Special Information:: Contact 3M for more information.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper

transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for Canadian ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

International Dangerous Goods Classification

15 Regulatory Information

WHMIS Classification: A, B5, D2B

NOTE:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Product Certifications:

The product on this MSDS, or all its components, is included on the following countries' chemical inventories, as noted:

- PICCS - Philippines Inventory of Commercial Chemical Substances
- TSCA - Toxic Substances Control Act (USA)
- AICS - Australian Inventory of Chemical Substances
- DSL - Domestic Substances List (Canada)
- CICS - Chinese Inventory of Chemical Substances
- EINECS - European Inventory of Existing Commercial Chemical Substances
- KECI - Korean Existing Chemicals Inventory

16 Other Information

Reason for Reissue:

The following Sections and topics have been updated or revised:
Section 3 - Hazards Identification - Critical Hazards;
Section 4 - First Aid Measures;
Section 5 - Fire Fighting Measures
Section 7 - Handling and Storage;
Section 8 - Exposure Controls/Personal Protection;

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