3M Canada Company 1840 Oxford Street East, Post Office Box 5757 London, Ontario N6A 4T1 Medical Emergency Telephone: (519) 451-2500, Ext. 2222 Transportation Emergency Telephone (CANUTEC): (613) 996-6666

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## Material Safety Data Sheet

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Prepared by: Corporate Regulatory Services, 3M Canada Company Telephone: (800) 364-3577, Fax: (800) 603-7758, Web Site: www.3M.ca

# 1 Product Identification

3M(TM) POLYSTYRENE FOAM INSULATION SPRAY ADHESIVE 78

Product ID:

CS-0406-7112-8 XT-0615-6786-0 CX-1406-7013-6 62-4951-4930-4 62-4951-4931-2 62-4951-4935-3 62-4951-4938-7 62-4951-4730-8

Intended Use of Product:

Aerosol Adhesive

Division:

Industrial Adhesives and Tapes

#### 2 Composition/Information on Ingredients \_\_\_\_\_

CAS Number Percentage Ingredient Name DIMETHYL ETHER 115-10-6 25 - 35
NONVOLATILE COMPONENTS (NJTSR# Trade Secret 15 - 25 04499600-6463P) 110-82-7 CYCLOHEXANE 10 - 20 75-37-6 1.1-DIFLUOROETHANE 10 - 20 142-82-5 3 - 7 **HEPTANES** 1 - 5 64742-48-9 PETROLEUM NAPHTHA 1 - 5 67-64-1 96-14-0 107-83-5 ACETONE 1 - 5 1 - 5 3-METHYLPENTANE 2-METHYLPENTANE

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79-29-8 110-54-3 2,3-DIMETHYLBUTANE **HEXANE** 0.1 - 0.4NOTE: 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: Flammable liquified gas. Aerosol container contains flammable gas under pressure. Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
Delayed Dermal Irritation: Signs/symptoms may include localized redness, swelling, itching, and pain. These effects may not appear immediately following exposure.

May be absorbed through skin and cause target organ effects.

May be absorbed following inhalation 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. 3M(TM) POLYSTYRENE FOAM INSULATION SPRAY ADHESIVE Page 3 of 10 � \_\_\_\_\_ 5 Fire Fighting Measures .\_\_\_\_ Flash point: -45.6 C TCC Lower Explosive Limit (%): Upper Explosive Limit (%): Not Available Not Available Autoignition temperature: Suitable Extinguishing Media: Not Available 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 Page 2

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floor to an ignition source and flash back.
 Combustion Products from Fire:
   Aldehydes - During Combustion;
   Hydrocarbons - During Combustion;
   Carbon monoxide - During Combustion;
Carbon dioxide - During Combustion;
 Fire Fighting Procedures:
   Wear full protective equipment (Bunker Gear) and a self-contained
   breathing apparatus (SCBA).
                                                      2
 NFPA: Health
 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:
   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 exhausted hood, or if necessary outdoors of an impermeable surface
   until appropriate packaging for the leaking container or its
   contents is available.
3M(TM) POLYSTYRENE FOAM INSULATION SPRAY ADHESIVE
                                                                    Page 4 of 10 �
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:
   No smoking while handling this material. Flammable liquified gas.
   Do not spray near flames or sources of ignition. Aerosol container contains flammable gas under pressure.
 Explosion Prevention:
   Keep away from heat, sparks, open flame, pilot lights and other
   sources of ignition.
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Use Instructions:

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Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Do not pierce or burn container, even after use. Avoid breathing of vapours, mists or spray. Avoid eye contact with vapours, mists, or spray. 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

Eve 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:

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.

Skin Protection:

3M(TM) POLYSTYRENE FOAM INSULATION SPRAY ADHESIVE Page 5 of 10 &#65533:

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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.

Respiratory Protection:

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 functioning spray booth or local exhaust. 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

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  DIMETHYL ETHER (115-10-6)
     LD50 (rat, oral)
LC50 (rat, inhalation/4 hours)
Exposure Limits
                                                         No data available.
                                                          164000 ppm
        CMRG: TWA 1000 ppm
AIHA: TWA 1000 ppm
  NONVOLATILE COMPONENTS (NJTSR# 04499600-6463P) (Trade Secret)
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)
LC50 (rat, inhalation/4 hours)
Exposure Limits
                                                          12,705 \text{ mg/kg}
                                                          No data available.
        ACGIH: TWA 100 ppm
  1,1-DIFLUOROETHANE (75-37-6)
     LD50 (rat, oral)
LC50 (rat, inhalation/4 hours)
Exposure Limits
                                                         No data available.
                                                         64,000 ppm
        CMRG: TWA 1000 ppm
AIHA: TWA 1000 ppm
3M(TM) POLYSTYRENE FOAM INSULATION SPRAY ADHESIVE Page 6 of 10 �
  AIHA: TWA 2700 mg/m3 HEPTANES (142-82-5)
     LC50 (rat, inhalation/4 hours) > 15000 mg/kg � 103 g/m3
  ACGIH: TWA 400 ppm
ACGIH: STEL 500 ppm
PETROLEUM NAPHTHA (64742-48-9)
Specific Ingredient Data
       No data available.
     LD50 (rat, oral)
                                                        No data available.
     LC50 (rat, inhalation/4 hours) No data available.
     Exposure Limits
        3M: TWA 100 ppm
  CMRG: TWA 300 ppm
CMRG: TWA 1900 mg/m3
ACETONE (67-64-1)
     LD50 (rat, oral)
LC50 (rat, inhalation/4 hours)
Exposure Limits
                                                         5800 mg/kg
                                                          No data available.
        ACGIH: TWA 500 ppm (Table A4)
        ACGIH: STEL 750 ppm (Table A4)
  3-METHYLPENTANE (96-14-0)
     LD50 (rat, oral)
LC50 (rat, inhalation/4 hours)
Exposure Limits
                                                          No data available.
                                                          No data available.
  ACGIH-TWA: 500 ppm
ACGIH: STEL 1000 ppm
2-METHYLPENTANE (107-83-5)
                                                          No data available.
     LD50 (rat, oral)
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LC50 (rat, inhalation/4 hours)
                                           No data available.
    Exposure Limits
      ACGIH: TWA 500 ppm
ACGIH: STEL 1000 ppm
  2,3-DIMETHYLBUTANE (79-29-8)
    LD50 (rat, oral)
LC50 (rat, inhalation/4 hours)
Exposure Limits
                                            No data available.
                                             No data available.
      ACGIH: TWA 500 ppm
ACGIH: STEL 1000 ppm
  HEXANE (110-54-3)
    LD50 (rat, oral)
LC50 (rat, inhalation/4 hours)
Exposure Limits
                                              28710 mg/kg
                                             38,500 ppm
      ACGIH: TWA 50 ppm (skin contact contributes to exposure)
3M(TM) POLYSTYRENE FOAM INSULATION SPRAY ADHESIVE
                                                          Page 7 of 10 �
9 Physical and Chemical Properties
                                   Gas; Aerosol; Clear; sweet, fruity odour.
 Physical form, Color, Odour:
                                             No data available.
Not Available
 Odour Threshold:
                                      No data available.
Not Available
 Boiling point/boiling range:
 Melting point/melting range:
 Vapour pressure:
                                             No data available.
 Water Solubility:
                                             Νil
                                             0.761 Water=1
>= 2.57 Air=1
Approx 55 % Calculated per
SCAQMD Rule 443.1
 Specific gravity:
 Vapour density:
 Volatile organic compounds:
                                             1.9 Ether=1
 Evaporation rate:
                                             Not applicable
 Viscosity:
 Percent Volatile:
                                             Approximately 80 % by weight
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10 Stability and Reactivity
 Conditions to Avoid:
Store out of direct sunlight.
Materials to Avoid:
   Store away from acids;
 Hazardous Decomposition:
   Aldehydes - During Combustion;
Hydrocarbons - During Combustion;
Carbon monoxide - During Combustion;
Carbon dioxide - During Combustion;
Stability and Reactivity:
   Stable. Hazardous polymerization will not occur.
11 Toxicological Information
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Effects from Eye Contact:
   Moderate Eye Irritation: Signs/symptoms may include redness,
   swelling, pain, tearing, and blurred or hazy vision.
 Effects from Skin Contact:
   Delayed Dermal Irritation: Signs/symptoms may include localized redness, swelling, itching, and pain. These effects may not appear
   immediately following exposure.
   May be absorbed through skin and cause target organ effects.
 Effects from Inhalation:
   Intentional concentration and inhalation may be harmful or fatal.
   Upper Respiratory Tract Irritation: Signs/symptoms may include
3M(TM) POLYSTYRENE FOAM INSULATION SPRAY ADHESIVE Page 8 of 10 �
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   cough, sneezing, nasal discharge, headache, hoarseness, and nose
   and throat pain.
   May be absorbed following inhalation and cause target organ
   effects.
 Effects from Ingestion:
   Gastrointestinal Irritation: Signs/symptoms may include abdominal
   pain, nausea, diarrhea and vomiting.
 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
   Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice. Peripheral Neuropathy: Signs/symptoms may include tingling or numbness of the extremities, incoordination, weakness of the hands and feet, tremors and muscle atrophy. Kidney Effects: Signs/symptoms may include reduced or absent urine production, increased serum creatinine, lower back pain, increased protein in uring and increased blood upon nitrogen (RUN)
   protein in urine, and increased blood urea nitrogen (BUN).
  12 Ecological Information
 Environmental Data:
 Ecotoxicity Data:
   Not determined.
 Ecofate Data:
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Not determined.

3M(TM) POLYSTYRENE FOAM INSULATION SPRAY ADHESIVE Page 9 of 10 � 78 13 Disposal Considerations Product as Sold: 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. 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 around shipment only. If you are shipping by air or occase the 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:

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3M(TM) POLYSTYRENE FOAM INSULATION SPRAY ADHESIVE Page 10 of 10 �

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

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 PICCS - Philippines Inventory of Commercial Chemical Substances TSCA - Toxic Substances Control Act (USA)

# 16 Other Information

Reason for Reissue:

The following Sections and topics have been updated or revised:

Deleted Product I.D.'s

Added product id(s) to the MSDS; Section 4 - First Aid Measures;

Section 5 - Fire Fighting Measures Section 8 - Exposure Controls/Personal Protection; Section 9 - Physical and Chemical Properties;

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