



## Material Safety Data Sheet

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M™ Scotch-Weld™ Hi-Strength Post Forming 94 CA Cylinder Spray Adhesive, Clear or Red  
**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:** 07/26/13  
**Supercedes Date:** 07/15/13

**Document Group:** 22-1382-5

#### Product Use:

Intended Use: Adhesive

### SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
Methyl acetate	79-20-9	65 - 75
Non-volatile components	Trade Secret	10 - 20
Rosin, polymer with isophthalic acid and pentaerythritol	68515-02-6	10 - 20 (typically 13.654)
Non-flammable propellant	7727-37-9	1 - 2
Dimethyl ether	115-10-6	< 1.0
Isobutane	75-28-5	< 0.6
Propane	74-98-6	< 0.5
TNPP	26523-78-4	< 0.1

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Odor, Color, Grade:** Liquid, clear or red, 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. 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.

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.

Intentional concentration and inhalation may be harmful or fatal.

May be absorbed following inhalation and cause target organ effects.

**Ingestion:**

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. If signs/symptoms develop, get 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

<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flash Point</b>	8 °F [ <i>Test Method: Closed Cup</i> ]
<b>Flammable Limits(LEL)</b>	3.1 % volume
<b>Flammable Limits(UEL)</b>	16 % volume

## 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.

**Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.**

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

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. 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. 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.

### 6.2. Environmental precautions

Collect the resulting residue containing solution. Place in a closed 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. Clean up residue.

**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. Avoid breathing of vapors, mists or spray. 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. For industrial or professional use only. Avoid contact with oxidizing agents. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment.

### 7.2 STORAGE

Store away from acids. Keep container in well-ventilated area. Store away from oxidizing agents.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Provide appropriate local exhaust ventilation on open containers. Use in an enclosed process area is recommended. Do not use in a confined area or areas with little or no air movement. Do not remain in area where available oxygen may be reduced. 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

Indirect Vented Goggles

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#### 8.2.2 Skin 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.

Gloves made from the following material(s) are recommended: Butyl Rubber

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#### 8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray.

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors

For questions about suitability for a specific application, consult with your respirator manufacturer.

#### 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

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
Dimethyl ether	AIHA	TWA	1880 mg/m <sup>3</sup>	
Dimethyl ether	CMRG	TWA	1000 ppm	
Isobutane	ACGIH	STEL	1000 ppm	
Methyl acetate	ACGIH	TWA	200 ppm	
Methyl acetate	ACGIH	STEL	250 ppm	
Methyl acetate	OSHA	TWA	610 mg/m <sup>3</sup>	
Propane	OSHA	TWA	1800 mg/m <sup>3</sup>	

#### 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

<b>Odor, Color, Grade:</b>	Liquid, clear or red, Solvent Odor
<b>General Physical Form:</b>	Gas
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flash Point</b>	8 °F [ <i>Test Method:</i> Closed Cup]
<b>Flammable Limits(LEL)</b>	3.1 % volume
<b>Flammable Limits(UEL)</b>	16 % volume
<b>Boiling Point</b>	140 °F
<b>Density</b>	0.93 g/ml
<b>Vapor Density</b>	2.8 [ <i>Ref Std:</i> AIR=1]
<b>Vapor Pressure</b>	163 mmHg [@ 20 °C]
<b>Specific Gravity</b>	0.93 - 0.95 [ <i>Ref Std:</i> WATER=1]
<b>pH</b>	<i>No Data Available</i>
<b>Melting point</b>	<i>No Data Available</i>
<b>Solubility in Water</b>	Nil
<b>Evaporation rate</b>	<i>No Data Available</i>
<b>Hazardous Air Pollutants</b>	0 - 0.1 % weight [ <i>Test Method:</i> Calculated]
<b>Volatile Organic Compounds</b>	<=687 g/l [ <i>Details:</i> EU VOC content]
<b>Kow - Oct/Water partition coef</b>	<i>No Data Available</i>
<b>Percent volatile</b>	0 - 2.4 %
<b>VOC Less H2O &amp; Exempt Solvents</b>	<=78 g/l [ <i>Test Method:</i> calculated SCAQMD rule 443.1]
<b>VOC Less H2O &amp; Exempt Solvents</b>	<=0.65 lb/gal [ <i>Test Method:</i> calculated SCAQMD rule 443.1]
<b>VOC Less H2O &amp; Exempt Solvents</b>	<=2.3 % [ <i>Test Method:</i> calculated per CARB title 2]
<b>Viscosity</b>	<i>No Data Available</i>
<b>Solids Content</b>	28.2 % weight

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

### Materials and Conditions to Avoid:

#### 10.1 Conditions to avoid

Sparks and/or flames

#### 10.2 Materials to avoid

Strong oxidizing agents

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

### Hazardous Decomposition or By-Products

#### Substance

Aldehydes  
Hydrocarbons  
Carbon monoxide

#### Condition

During Combustion  
During Combustion  
During Combustion

Carbon dioxide  
Irritant Vapors or Gases

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 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.

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

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

## SECTION 14: TRANSPORT INFORMATION

### ID Number(s):

62-4960-8010-2, 62-4960-8030-0, 62-4960-8150-6, 62-4960-8300-7, 62-4970-8010-1, 62-4970-8030-9, 62-4970-8150-5, 62-4970-8300-6

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

### 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.

## **ADDITIONAL INFORMATION**

South Coast Air Quality Management District Rule 1168 Compliant.

**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: 3 Reactivity: 0 Special Hazards: None**

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 3: Potential effects from inhalation information was modified.

Section 3: Potential effects from ingestion information was modified.

Section 15: Inventories information was modified.

Section 2: Ingredient table was modified.

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