



## Material Safety Data Sheet

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M™ Scotch-Weld™ Retaining Compound 3436, Gray - Discontinued

**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:** 09/18/09

**Supersedes Date:** 01/22/08

**Document Group:** 20-2847-0

#### Product Use:

Specific Use: Anaerobic Retaining Compound  
Intended Use: Industrial use

### SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
Hydroxypropyl Methacrylate	27813-02-1	30 - 60
Bisphenol A bis(2-Hydroxyethyl Ether) Dimethacrylate	24448-20-2	15 - 40
Amorphous Silica, Crystalline Free	112945-52-5	5 - 10
Polyester Resin Blend	Trade Secret	5 - 10
Titanium Dioxide	13463-67-7	1 - 5
Cumene Hydroperoxide	80-15-9	1 - 5
Maleic Anhydride	108-31-6	0.5 - 1.5
Cumene	98-82-8	0.1 - 1
Saccharin	81-07-2	0.1 - 1
1-Acetyl-2-Phenylhydrazine	114-83-0	0.1 - 1
Methyl Alcohol	67-56-1	0.1 - 1

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Paste

**Odor, Color, Grade:** Mild odor, silver-gray paste

**General Physical Form:** Liquid

**Immediate health, physical, and environmental hazards:** May cause severe eye irritation. May cause allergic skin reaction. May cause allergic respiratory reaction. May cause target organ effects. Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

### 3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Vapors released during curing may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

**Skin Contact:**

Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

May be absorbed through skin and cause target organ effects.

**Inhalation:**

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

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:**

Prolonged or repeated exposure may cause:

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

## 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:** Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

**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

Autoignition temperature	<i>No Data Available</i>
Flash Point	$\geq 200$ °F [ <i>Test Method: Closed Cup</i> ]
Flammable Limits - LEL	<i>No Data Available</i>
Flammable Limits - UEL	<i>No Data Available</i>

### 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:** Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Water may be used to blanket the fire. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** No unusual fire or explosion hazards are anticipated.

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

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Accidental Release Measures:** Observe precautions from other sections. 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. 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. Collect as much of the spilled material as possible. Clean up residue with an appropriate organic solvent. Read and follow safety precautions on the solvent label and MSDS. 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.

**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**

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid breathing of vapors, mists or spray. Avoid skin contact. For industrial or professional use only. Avoid contact with oxidizing agents. Keep out of the reach of children.

### **7.2 STORAGE**

Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed. Store away from oxidizing agents.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 ENGINEERING CONTROLS**

Use with appropriate local exhaust ventilation. 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.

The following eye protection(s) are recommended: Safety Glasses with side shields, Indirect Vented Goggles.

#### **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: Neoprene, Nitrile Rubber, Polyvinyl Chloride, Polyethylene/Ethylene Vinyl Alcohol.

#### **8.2.3 Respiratory Protection**

Avoid breathing of vapors, mists or spray.

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**

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
Cumene	ACGIH	TWA	50 ppm	
Cumene	OSHA	TWA	50 ppm	Skin Notation*; Table Z-1
Cumene Hydroperoxide	AIHA	TWA	1 ppm	Skin Notation*
Hydroxypropyl Methacrylate	CMRG	CEIL	3 ppm	
Maleic Anhydride	ACGIH	TWA	0.1 ppm	Sensitizer; Table A4
Maleic Anhydride	OSHA	TWA	0.25 ppm	Table Z-1
Methyl Alcohol	ACGIH	TWA	200 ppm	Skin Notation*
Methyl Alcohol	ACGIH	STEL	250 ppm	Skin Notation*
Methyl Alcohol	OSHA	TWA	200 ppm	Skin Notation*; Table Z-1A
Methyl Alcohol	OSHA	STEL	250 ppm	Skin Notation*; Table Z-1A
Titanium Dioxide	ACGIH	TWA	10 mg/m3	Table A4
Titanium Dioxide	CMRG	TWA, as respirable dust	5 mg/m3	
Titanium Dioxide	OSHA	TWA, Vacated, as dust	10 mg/m3	
Titanium Dioxide	OSHA	TWA, as total dust	15 mg/m3	Table Z-1

\* Substance(s) refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

VAC Vacated PEL: Vacated Permissible Exposure Limits [PEL] are enforced as the OSHA PEL in some states. Check with your local regulatory agency.

**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>Specific Physical Form:</b>	Paste
<b>Odor, Color, Grade:</b>	Mild odor, silver-gray paste
<b>General Physical Form:</b>	Liquid
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flash Point</b>	>=200 °F [ <i>Test Method: Closed Cup</i> ]
<b>Flammable Limits - LEL</b>	<i>No Data Available</i>
<b>Flammable Limits - UEL</b>	<i>No Data Available</i>
<b>Boiling point</b>	>=149 °C
<b>Density</b>	1.14 g/ml
<b>Vapor Density</b>	<i>No Data Available</i>
<b>Vapor Pressure</b>	<=5.0 mmHg [@ 68 °F]
<b>Specific Gravity</b>	1.14 [ <i>Ref Std: WATER=1</i> ]
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Solubility in Water</b>	Nil
<b>Evaporation rate</b>	Negligible
<b>Hazardous Air Pollutants</b>	1.7 - 1.8 % weight
<b>Volatile Organic Compounds</b>	< 3 % weight
<b>VOC Less H2O &amp; Exempt Solvents</b>	< 30 g/l

Viscosity

1000000 - 2000000 centipoise [@ 73.4 °F] [Test Method: Brookfield]

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:** Strong oxidizing agents; Heat; Sparks and/or flames; Light

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

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Irritant Vapors or Gases	During Combustion
Oxides of Nitrogen	During Combustion
Oxides of Sulfur	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:** Dispose of completely cured (or polymerized) wastes in a sanitary landfill. Incinerate in an industrial or commercial facility in the presence of a combustible material. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

**EPA Hazardous Waste Number (RCRA):** Not regulated

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

## SECTION 14: TRANSPORT INFORMATION

**ID Number**  
62-3436-5030-5

**UPC**  
00048011573465

**ID Number**  
62-3436-5035-4

**UPC**  
00000000000000

Not regulated per U.S. DOT, IATA or IMO.

*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 U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.*

## **SECTION 15: REGULATORY INFORMATION**

### **US FEDERAL REGULATIONS**

Contact 3M for more information.

#### **311/312 Hazard Categories:**

Fire Hazard - No    Pressure Hazard - No    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):**

<u><b>Ingredient</b></u>	<u><b>C.A.S. No</b></u>	<u><b>% by Wt</b></u>
Cumene Hydroperoxide	80-15-9	1 - 5

### **STATE REGULATIONS**

Contact 3M for more information.

### **CHEMICAL INVENTORIES**

The components of this product are in compliance with the chemical notification requirements of TSCA.

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: 1 Reactivity: 1 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 1: Product name was modified.

Copyright was modified.

Section 7: Handling information was modified.

Section 8: Engineering controls information was modified.

Section 8: Respiratory protection information was modified.

Section 10: Hazardous decomposition or by-products table was modified.

Section 10: Materials and conditions to avoid physical property was modified.

Section 10: Hazardous polymerization physical property was modified.

Section 14: Transportation legal text was modified.

Page Heading: Product name was modified.

Section 15: 311/312 Reactivity Hazard score was modified.

Section 9: Property description for optional properties was modified.

Section 1: Trade name status was modified.

Section 2: Ingredient table was modified.

Section 3: Hazardous Polymerization information was deleted.

Section 15: California proposition 65 ingredient information was deleted.

Section 15: California proposition 65 heading was deleted.

Section 15: California proposition 65 cancer warning was deleted.

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