

# **Safety Data Sheet**

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## **SECTION 1: Identification**

### 1.1. Product identifier

3M(TM) Scotch-Weld(TM) Non-Flammmable Instant Adhesive Activator AC09, Clear

### **Product Identification Numbers**

62-6198-0860-3, 62-6198-0865-2, 62-6198-8360-6, 62-6198-8361-4

## 1.2. Recommended use and restrictions on use

### Recommended use

Adhesive activator

1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** Industrial Adhesives and Tapes Division **ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA **Telephone:** 1-888-3M HELPS (1-888-364-3577)

## 1.4. Emergency telephone number

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

## **SECTION 2: Hazard identification**

### 2.1. Hazard classification

Carcinogenicity: Category 1B.

### 2.2. Label elements

## Signal word

Danger

## **Symbols**

Health Hazard |

## **Pictograms**



### **Hazard Statements**

May cause cancer.

## **Precautionary Statements**

### **Prevention:**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves.

**Response:** 

IF exposed or concerned: Get medical advice/attention.

**Storage:** 

Store locked up.

## Disposal:

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

# **SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
Ethylnonafluoroisobutyl Ether	163702-06-5	50 - 80
Ethylnonafluorobutyl Ether	163702-05-4	20 - 50
N,N-Dimethyl-p-Toluidine	99-97-8	< 1 Trade Secret *

<sup>\*</sup>The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

#### Inhalation:

Remove person to fresh air. If you are concerned, get medical advice.

**Skin Contact:** 

Wash with soap and water. If you feel unwell, get medical attention.

**Eye Contact:** 

No need for first aid is anticipated.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

## 4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

## 4.3. Indication of any immediate medical attention and special treatment required

Not applicable

# **SECTION 5: Fire-fighting measures**

### 5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

## 5.2. Special hazards arising from the substance or mixture

Exposure to extreme heat can give rise to thermal decomposition.

## **Hazardous Decomposition or By-Products**

<u>Substance</u> Hydrogen Fluoride Perfluoroisobutylene (PFIB)

## **Condition**

During Combustion During Combustion

## 5.3. Special protective actions for fire-fighters

When fire fighting conditions are severe and total thermal decomposition of the product is possible, wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

## **SECTION 6: Accidental release measures**

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

Evacuate area. 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. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

## 6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

## 6.3. Methods and material for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Do not breathe thermal decomposition products. Store work clothes separately from other clothing, food and tobacco products. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. No smoking: Smoking while using this product can result in contamination of the tobacco and/or smoke and lead to the formation of hazardous decomposition products. Use personal protective equipment (gloves, respirators, etc.) as required.

## 7.2. Conditions for safe storage including any incompatibilities

Store away from heat. Store away from strong bases.

# **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

### Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	<b>Additional Comments</b>
Ethylnonafluorobutyl Ether	163702-05-	Manufacturer	TWA(as total isomers):200	
	4	determined	ppm(2160 mg/m3)	
Ethylnonafluoroisobutyl Ether	163702-06-	Manufacturer	TWA(as total isomers):200	
	5	determined	ppm(2160 mg/m3)	
N,N-Dimethyl-p-Toluidine	99-97-8	AIHA	TWA:0.5 ppm	

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

OSHA: United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

## 8.2. Exposure controls

### 8.2.1. Engineering controls

Provide appropriate local exhaust when product is heated. For those situations where the material might be exposed to extreme overheating due to misuse or equipment failure, use with appropriate local exhaust ventilation sufficient to maintain levels of thermal decomposition products below their exposure guidelines. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

## 8.2.2. Personal protective equipment (PPE)

## Eye/face protection

Eye protection not required.

### Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polymer laminate

### Respiratory protection

### During heating:

Use a positive pressure supplied-air respirator if there is a potential for over exposure from an uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate protection.

# **SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties General Physical Form:**Liquid

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Odor, Color, Grade:Clear liquid, faint odorOdor thresholdNo Data AvailablepHNot ApplicableMelting pointNot Applicable

**Boiling Point** 76 °C

Flash PointNo flash pointEvaporation rateNo Data AvailableFlammability (solid, gas)Not ApplicableFlammable Limits(LEL)210 g/m3Flammable Limits(UEL)1070 g/m3

Vapor Pressure 109 mmHg [@ 25 °C]

Vapor Density Approximately 9.1 [Ref Std: AIR=1]

**Density** 1.43 g/ml

Specific Gravity 1.43 [Ref Std:WATER=1]

Solubility in Water Nil

**Solubility- non-water**Partition coefficient: n-octanol/ water
No Data Available
No Data Available

**Autoignition temperature** 375 °C

Decomposition temperatureNo Data AvailableViscosityNo Data Available

Hazardous Air Pollutants0 % weight [Test Method: Calculated]Percent volatile100 % weight [Test Method: Estimated]

**VOC Less H2O & Exempt Solvents** 0 g/l [*Test Method*:calculated per CARB title 2]

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

## 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### 10.4. Conditions to avoid

Heat

## 10.5. Incompatible materials

Strong bases

## 10.6. Hazardous decomposition products

**Substance** Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

If the product is exposed to extreme condition of heat from misuse or equipment failure, toxic decomposition products that include hydrogen fluoride and perfluoroisobutylene can occur.

# **SECTION 11: Toxicological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 11.1. Information on Toxicological effects

## Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

#### **Inhalation:**

No known health effects.

#### **Skin Contact:**

May be harmful in contact with skin.

Contact with the skin during product use is not expected to result in significant irritation.

## **Eye Contact:**

Contact with the eyes during product use is not expected to result in significant irritation.

### **Ingestion:**

May be harmful if swallowed.

May cause additional health effects (see below).

### **Additional Health Effects:**

## Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

<u>Ingredient</u>	CAS No.	Class Description	Regulation
N,N-Dimethyl-p-Toluidine	99-97-8	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

## **Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

## **Acute Toxicity**

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE2,000 - 5,000 mg/kg
Overall product	Inhalation- Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
Ethylnonafluoroisobutyl Ether	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Ethylnonafluoroisobutyl Ether	Inhalation- Vapor (4 hours)	Rat	LC50 > 989 mg/l
Ethylnonafluoroisobutyl Ether	Ingestion	Rat	LD50 > 2,000 mg/kg
Ethylnonafluorobutyl Ether	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Ethylnonafluorobutyl Ether	Inhalation- Vapor (4 hours)	Rat	LC50 > 989 mg/l
Ethylnonafluorobutyl Ether	Ingestion	Rat	LD50 > 2,000 mg/kg
N,N-Dimethyl-p-Toluidine	Dermal	Rabbit	LD50 > 2,000 mg/kg
N,N-Dimethyl-p-Toluidine	Inhalation- Dust/Mist (4 hours)	Rat	LC50 1.4 mg/l

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N,N-Dimethyl-p-Toluidine	Ingestion	Rat	LD50 1,650 mg/kg
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ATE = acute toxicity estimate

## **Skin Corrosion/Irritation**

Name	Species	Value
Ethylnonafluoroisobutyl Ether	Rabbit	No significant irritation
Ethylnonafluorobutyl Ether	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Ethylnonafluoroisobutyl Ether	Rabbit	No significant irritation
Ethylnonafluorobutyl Ether	Rabbit	No significant irritation

### **Skin Sensitization**

Name	Species	Value
Ethylnonafluoroisobutyl Ether	Guinea	Not classified
	pig	
Ethylnonafluorobutyl Ether	Guinea	Not classified
	pig	

## **Respiratory Sensitization**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Germ Cell Mutagenicity** 

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Name	Route	Value
Ethylnonafluoroisobutyl Ether	In Vitro	Not mutagenic
Ethylnonafluoroisobutyl Ether	In vivo	Not mutagenic
Ethylnonafluorobutyl Ether	In Vitro	Not mutagenic
Ethylnonafluorobutyl Ether	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
N,N-Dimethyl-p-Toluidine	Ingestion	Multiple	Carcinogenic
		animal	
		species	

# Reproductive Toxicity

Reproductive and/or Developmental Effects

Reproductive and/or Developmental Effects							
Name	Route	Value	Species	Test Result	Exposure		
					Duration		
Ethylnonafluoroisobutyl Ether	Inhalation	Not classified for development	Rat	NOAEL 260	during		
				mg/l	gestation		
Ethylnonafluorobutyl Ether	Inhalation	Not classified for development	Rat	NOAEL 260	during		
				mg/l	gestation		

## Target Organ(s)

**Specific Target Organ Toxicity - single exposure** 

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Ethylnonafluoroisobutyl Ether	Inhalation	cardiac sensitization	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 204 mg/l	17 minutes
Ethylnonafluoroisobutyl Ether	Inhalation	respiratory irritation	Not classified	Rat	NOAEL 989 mg/l	4 hours
Ethylnonafluorobutyl Ether	Inhalation	cardiac sensitization	Some positive data exist, but the data are not sufficient for	Dog	NOAEL 204 mg/l	17 minutes

			classification			
Ethylnonafluorobutyl Ether	Inhalation	respiratory irritation	Not classified	Rat	NOAEL 989	4 hours
					mg/l	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Ethylnonafluoroisobutyl Ether	Inhalation	liver   kidney and/or bladder   respiratory system   heart   endocrine system   gastrointestinal tract   bone marrow   hematopoietic system   immune system   nervous system	Not classified	Rat	NOAEL 263.4 mg/l	4 weeks
Ethylnonafluoroisobutyl Ether	Ingestion	blood   liver   kidney and/or bladder   heart   endocrine system   bone marrow   hematopoietic system   immune system   nervous system   respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Ethylnonafluorobutyl Ether	Inhalation	liver   kidney and/or bladder   respiratory system   heart   endocrine system   gastrointestinal tract   bone marrow   hematopoietic system   immune system   nervous system	Not classified	Rat	NOAEL 263.4 mg/l	4 weeks
Ethylnonafluorobutyl Ether	Ingestion	blood   liver   kidney and/or bladder   heart   endocrine system   bone marrow   hematopoietic system   immune system   nervous system   respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days

## **Aspiration Hazard**

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

# **SECTION 12: Ecological information**

## **Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

## **Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

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# **SECTION 13: Disposal considerations**

## 13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Proper destruction may require the use of additional fuel during incineration processes. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): Not regulated

# **SECTION 14: Transport Information**

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

# **SECTION 15: Regulatory information**

## 15.1. US Federal Regulations

Contact 3M for more information.

## **EPCRA 311/312 Hazard Classifications:**

### Physical Hazards

Not applicable

## **Health Hazards**

Carcinogenicity

This material contains a chemical which requires export notification under TSCA Section 12[b]:

### 15.2. State Regulations

Contact 3M for more information.

## 15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## **SECTION 16: Other information**

NFPA Hazard Classification

Health: 0 Flammability: 1 Instability: 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.

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