

# **Safety Data Sheet**

Copyright, 2018, 3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

 Document Group:
 11-3195-2
 Version Number:
 10.10

 Issue Date:
 04/26/18
 Supercedes Date:
 02/21/18

#### **Product identifier**

3M<sup>™</sup> Scotch-Weld<sup>™</sup> Urethane Adhesive EC-3549 B/A

### ID Number(s):

 $62-3549-6440-5,\,87-2500-0412-1,\,87-2500-0437-8,\,87-3300-0131-1,\,87-3300-0686-4,\,87-3300-0687-2,\,87-3300-0692-2,\,87-3300-0693-0$ 

#### Recommended use

Two-Component Polyurethane Adhesive

## Supplier's details

**MANUFACTURER:** 3M

**DIVISION:** Automotive and Aerospace Solutions Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA

**Telephone:** 1-888-3M HELPS (1-888-364-3577)

### **Emergency telephone number**

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

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS), Article Information Sheet (AIS), or Article Information Letter (AIL) for each of these components is included. Please do not separate the component documents from this cover page. The document numbers for components of this product are:

10-8546-3, 10-8304-7

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued.3MMAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3Mproduct is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3Mproduct, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3Mproduct to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3Mprovides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information,3Mmakes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from3M

3M<sup>TM</sup> Scotch-Weld<sup>TM</sup> Urethane Adhesive EC-3549 B/A

04/26/18

3M USA SDSs are available at www.3M.com



## **Safety Data Sheet**

Copyright,2018,3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

 Document Group:
 10-8546-3
 Version Number:
 29.00

 Issue Date:
 10/22/18
 Supercedes Date:
 03/01/18

## **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>TM</sup> Scotch-Weld<sup>TM</sup> Urethane Adhesive EC-3549 B/A Part A

#### **Product Identification Numbers**

LA-T100-2446-4, LC-B100-0907-5, LC-B100-0962-2, LC-B100-0962-3, LA-D100-0169-8, 62-3649-8540-8

#### 1.2. Recommended use and restrictions on use

### Recommended use

Accelerator of 2-Part Urethane Adhesive, Industrial use

1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:**Automotive and Aerospace Solutions 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

Serious Eye Damage/Irritation: Category 2A.

Skin Corrosion/Irritation: Category 2. Respiratory Sensitizer: Category 1.

Skin Sensitizer: Category 1.

Specific Target Organ Toxicity (single exposure): Category 3. Specific Target Organ Toxicity (repeated exposure): Category 1.

## 2.2. Label elements

### Signal word

Danger

## **Symbols**

Exclamation mark | Health Hazard |

**Page 1 of** 11

#### **Pictograms**





#### **Hazard Statements**

Causes serious eye irritation.

Causes skin irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

May cause respiratory irritation.

Causes damage to organs through prolonged or repeated exposure:

respiratory system

#### **Precautionary Statements**

#### **Prevention:**

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

In case of inadequate ventilation wear respiratory protection.

Wear protective gloves and eye/face protection.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

### **Response:**

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Get medical advice/attention if you feel unwell.

#### **Storage:**

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

## Disposal:

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

## **Supplemental Information:**

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

2% of the mixture consists of ingredients of unknown acute oral toxicity.

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

Ingredient   C.A.S. No.   % by Wt
-----------------------------------

**Page 2 of** 11

Urethane Prepolymer - NJTS Reg. No. 04499600-5770P	Trade Secret*	15 - 40
P,P'-Methylenebis(phenyl isocyanate)	101-68-8	10 - 30 Trade Secret *
Polymethylene Polyphenylene Isocyanate	9016-87-9	10 - 30 Trade Secret *
Talc	14807-96-6	10 - 30 Trade Secret *
Diphenylmethane Diisocyanate (MDI)	26447-40-5	1 - 10 Trade Secret *
Zeolite	68989-22-0	1 - 5
Sodium Oxide	1313-59-3	0 - 0.4

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

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

#### 4.1. Description of first aid measures

#### **Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

## **Skin Contact:**

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

#### **Eye Contact:**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

## 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 carbon dioxide or dry chemical extinguisher to extinguish.

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

None inherent in this product.

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

Substance	<b>Condition</b>
Isocyanates	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Cyanide	During Combustion
Oxides of Nitrogen	During Combustion

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

#### 5.3. Special protective actions for fire-fighters

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. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. 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 container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. 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. 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

For industrial/occupational use only. Not for consumer sale or use. 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. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

### 7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from acids. Store away from strong bases. Store away from oxidizing agents. Store away from amines.

## **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>
P,P'-Methylenebis(phenyl	101-68-8	ACGIH	TWA:0.005 ppm	
isocyanate)				
P,P'-Methylenebis(phenyl	101-68-8	OSHA	CEIL:0.2 mg/m3(0.02 ppm)	
isocyanate)				
Talc	14807-96-6	ACGIH	TWA(respirable fraction):2	A4: Not class. as human
			mg/m3	carcin
Talc	14807-96-6	OSHA	TWA:2 mg/m3	

Page 4 of 11

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

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

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

**Indirect Vented Goggles** 

## 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

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

#### Respiratory protection

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 and particulates

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

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

### 9.1. Information on basic physical and chemical properties

General Physical Form:

Specific Physical Form:

Paste

Odor, Color, Grade:Brown, slight odor.Odor thresholdNo Data AvailablepHNot ApplicableMelting pointNot ApplicableBoiling Point>=186 °C

Flash Point >=367 °F [Test Method:Closed Cup]

Evaporation rateNot ApplicableFlammability (solid, gas)Not ApplicableFlammable Limits(LEL)Not Applicable

**Page** 5 of 11

Flammable Limits(UEL)

Vapor Pressure

Vapor Density

No Data Available

**Density** 1.34 g/ml

Specific Gravity 1.34 [Ref Std:WATER=1]

Solubility in WaterNegligibleSolubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNot ApplicableDecomposition temperatureNo Data Available

Viscosity 15,000 - 32,000 centipoise [@ 73.4 °F ] [Test Method: Brookfield]

Molecular weight No Data Available

**Volatile Organic Compounds** 0 g/l [*Test Method*:calculated SCAQMD rule 443.1]

Percent volatile 0.0 % weight

VOC Less H2O & Exempt Solvents 0 g/l [Test Method:calculated SCAQMD rule 443.1]

## **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 is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature exothermic reaction with production of intense heat and smoke.

## 10.5. Incompatible materials

Amines

Alcohols

Water

Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

Strong acids

Strong bases

Strong oxidizing agents

## 10.6. Hazardous decomposition products

**Substance** Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

## **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

**Page** 6 of 11

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:**

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.

May cause additional health effects (see below).

## **Skin Contact:**

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

### **Eve Contact:**

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

#### Ingestion:

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

#### **Additional Health Effects:**

## Prolonged or repeated exposure may cause target organ effects:

Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

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.

## **Additional Information:**

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

## **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	Inhalation- Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Urethane Prepolymer - NJTS Reg. No. 04499600-5770P	Dermal		LD50 estimated to be > 5,000 mg/kg
Urethane Prepolymer - NJTS Reg. No. 04499600-5770P	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Talc	Dermal		LD50 estimated to be > 5,000 mg/kg
Talc	Ingestion		LD50 estimated to be > 5,000 mg/kg
Polymethylene Polyphenylene Isocyanate	Dermal	Rabbit	LD50 > 5,000 mg/kg
Polymethylene Polyphenylene Isocyanate	Inhalation- Dust/Mist	Rat	LC50 0.368 mg/l

Page 7 of 11

3MTM	Scotch-V	VeldTM l	Urethane .	Adhesive	EC-3549	R/A	Part A

	(4 hours)		
Polymethylene Polyphenylene Isocyanate	Ingestion	Rat	LD50 31,600 mg/kg
P,P'-Methylenebis(phenyl isocyanate)	Dermal	Rabbit	LD50 > 5,000 mg/kg
P,P'-Methylenebis(phenyl isocyanate)	Inhalation-	Rat	LC50 0.368 mg/l
	Dust/Mist		
	(4 hours)		
P,P'-Methylenebis(phenyl isocyanate)	Ingestion	Rat	LD50 31,600 mg/kg
Diphenylmethane Diisocyanate (MDI)	Dermal	Rabbit	LD50 > 5,000 mg/kg
Diphenylmethane Diisocyanate (MDI)	Inhalation-	Rat	LC50 0.368 mg/l
	Dust/Mist		
	(4 hours)		
Diphenylmethane Diisocyanate (MDI)	Ingestion	Rat	LD50 31,600 mg/kg
Sodium Oxide	Ingestion		LD50 estimated to be 50 - 300 mg/kg

 $\overline{ATE}$  = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
Talc	Rabbit	No significant irritation
Polymethylene Polyphenylene Isocyanate	official classifica tion	Irritant
P,P'-Methylenebis(phenyl isocyanate)	official classifica tion	Irritant
Diphenylmethane Diisocyanate (MDI)	official classifica tion	Irritant

Serious Eye Damage/Irritation		
Name	Species	Value
Talc	Rabbit	No significant irritation
Polymethylene Polyphenylene Isocyanate	official	Severe irritant
	classifica	
	tion	
P,P'-Methylenebis(phenyl isocyanate)	official	Severe irritant
	classifica	
	tion	
Diphenylmethane Diisocyanate (MDI)	official	Severe irritant
	classifica	
	tion	

## **Skin Sensitization**

Skiii Schistization		
Name	Species	Value
Polymethylene Polyphenylene Isocyanate	official	Sensitizing
	classifica	_
	tion	
P,P'-Methylenebis(phenyl isocyanate)	official	Sensitizing
	classifica	_
	tion	
Diphenylmethane Diisocyanate (MDI)	official	Sensitizing
	classifica	
	tion	

**Respiratory Sensitization** 

Respiratory Sensitization		
Name	Species	Value
Talc	Human	Not classified
Polymethylene Polyphenylene Isocyanate	Human	Sensitizing
P,P'-Methylenebis(phenyl isocyanate)	Human	Sensitizing
Diphenylmethane Diisocyanate (MDI)	Human	Sensitizing

**Page** 8 **of** 11

**Germ Cell Mutagenicity** 

Name	Route	Value
Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic
Polymethylene Polyphenylene Isocyanate	In Vitro	Some positive data exist, but the data are not sufficient for classification
P,P'-Methylenebis(phenyl isocyanate)	In Vitro	Some positive data exist, but the data are not sufficient for classification
Diphenylmethane Diisocyanate (MDI)	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Talc	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Polymethylene Polyphenylene Isocyanate	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
P,P'-Methylenebis(phenyl isocyanate)	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Diphenylmethane Diisocyanate (MDI)	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification

# Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Talc	Ingestion	Not classified for development	Rat	NOAEL 1,600 mg/kg	during organogenesi s
Polymethylene Polyphenylene Isocyanate	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesi s
P,P'-Methylenebis(phenyl isocyanate)	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesi s
Diphenylmethane Diisocyanate (MDI)	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesi s

# Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Polymethylene Polyphenylene Isocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	official classifica tion	NOAEL Not available	
P,P'-Methylenebis(phenyl isocyanate)	Inhalation	respiratory irritation	May cause respiratory irritation	official classifica tion	NOAEL Not available	
Diphenylmethane Diisocyanate (MDI)	Inhalation	respiratory irritation	May cause respiratory irritation	official classifica tion	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Talc	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pulmonary fibrosis   respiratory system	Not classified	Rat	NOAEL 18 mg/m3	113 weeks
Polymethylene	Inhalation	respiratory system	Causes damage to organs through	Rat	LOAEL	13 weeks

**Page** 9 **of** 11

Polyphenylene Isocyanate			prolonged or repeated exposure		0.004 mg/l	
P,P'-Methylenebis(phenyl	Inhalation	respiratory system	Causes damage to organs through	Rat	LOAEL	13 weeks
isocyanate)			prolonged or repeated exposure		0.004 mg/l	
Diphenylmethane	Inhalation	respiratory system	Causes damage to organs through	Rat	LOAEL	13 weeks
Diisocyanate (MDI)			prolonged or repeated exposure		0.004 mg/l	

### **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.

## **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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	P	hy	sic	al	H	aza	rd	S
------------------	---	----	-----	----	---	-----	----	---

Not applicable

#### **Health Hazards**

Respiratory or Skin Sensitization

Page 10 of

30

Serious eye damage or eye irritation

Skin Corrosion or Irritation

Specific target organ toxicity (single or repeated exposure)

## Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>	
Polymethylene Polyphenylene Isocyanate	9016-87-9	Trade Secret	10 - 3
P,P'-Methylenebis(phenyl isocyanate)	101-68-8	Trade Secret	10 - 3

## 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: 2 Flammability: 1 Instability: 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.

 Document Group:
 10-8546-3
 Version Number:
 29.00

 Issue Date:
 10/22/18
 Supercedes Date:
 03/01/18

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued.3MMAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3Mprovides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information,3Mmakes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from3M

#### 3M USA SDSs are available at www.3M.com

Page 11 of 11



# **Safety Data Sheet**

Copyright,2019,3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

 Document Group:
 10-8304-7
 Version Number:
 27.06

 Issue Date:
 01/14/19
 Supercedes Date:
 02/22/18

## **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>TM</sup> Scotch-Weld<sup>TM</sup> Urethane Adhesive EC-3549 B/A Part B

#### **Product Identification Numbers**

LA-D100-0169-9, LA-T100-2446-5, LC-B100-0907-4, LC-B100-0962-4, LC-B100-0962-5

### 1.2. Recommended use and restrictions on use

### Recommended use

Automotive, Base of 2-Part Urethane Adhesive

1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:**Automotive and Aerospace Solutions 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

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## 2.2. Label elements

## Signal word

Not applicable.

## Symbols

Not applicable.

### **Pictograms**

Not applicable.

1% of the mixture consists of ingredients of unknown acute dermal toxicity.

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

Ingredient	C.A.S. No.	% by Wt
Polyester Resin	Trade Secret*	30 - 60
Polypropylene Glycol	25322-69-4	10 - 30
Talc	14807-96-6	10 - 30 Trade Secret *
Polyoxypropylene Triol	25723-16-4	3 - 7
o-Diethylbisaniline	13680-35-8	1 - 5 Trade Secret *
Silica	7631-86-9	0 - 5
BETA-(3,4-	3388-04-3	< 1
EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY		
SILANE		
SODIUM OXIDE	1313-59-3	< 0.5

<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 feel unwell, get medical attention.

### **Skin Contact:**

Wash with soap and water. If signs/symptoms develop, 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 carbon dioxide or dry chemical extinguisher to extinguish.

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

None inherent in this product.

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

SubstanceConditionCarbon monoxideDuring CombustionCarbon dioxideDuring CombustionIrritant Vapors or GasesDuring Combustion

## 5.3. Special protective actions for fire-fighters

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. Observe precautions from other sections.

## 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

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

For industrial/occupational use only. Not for consumer sale or use. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

## 7.2. Conditions for safe storage including any incompatibilities

Store away from oxidizing agents.

# **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	Additional Comments
DUST, INERT OR NUISANCE	14807-96-6	OSHA	TWA(as total dust):15	
			mg/m3;TWA(as total dust):50	
			millions of particles/cu. ft.(15	
			mg/m3);TWA(respirable	
			fraction):15 millions of	
			particles/cu. ft.(5	
			mg/m3);TWA(respirable	
			fraction):5 mg/m3	
Talc	14807-96-6	ACGIH	TWA(respirable fraction):2	A4: Not class. as human
			mg/m3	carcin
Talc	14807-96-6	OSHA	TWA:2 mg/m3	

Polypropylene Glycol	25322-69-4	AIHA	TWA(as aerosol):10 mg/m3	
SILICA, AMORPHOUS	7631-86-9	OSHA	TWA concentration:0.8	
			mg/m3;TWA:20 millions of	
			particles/cu. ft.	

01/14/19

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

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

None required.

#### Skin/hand protection

No chemical protective gloves are required.

## **Respiratory protection**

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 and particulates

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

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

## 9.1. Information on basic physical and chemical properties

General Physical Form:

Specific Physical Form:

Paste

Odor, Color, Grade: Off-White, Viscous Liquid, Slight Mild Odor.

Odor thresholdNo Data AvailablepHNot ApplicableMelting pointNot ApplicableBoiling Point>=354 °F

Flash Point >=354 °F [Test Method:Closed Cup]

Evaporation rate

Flammability (solid, gas)

Flammable Limits(LEL)

Flammable Limits(UEL)

Vapor Pressure

No Data Available

Not Applicable

1.31 g/ml

Specific Gravity 1.31 [Ref Std: WATER=1]

Solubility in Water Negligible

3M<sup>TM</sup> Scotch-Weld<sup>TM</sup> Urethane Adhesive EC-3549 B/A Part B

01/14/19

Solubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNo Data AvailableDecomposition temperatureNo Data Available

Viscosity 10,000 - 40,000 centipoise [@ 73.4 °F]

Hazardous Air Pollutants 0 g/l

Molecular weight No Data Available

**Volatile Organic Compounds** <=7 g/l [*Test Method*:calculated SCAQMD rule 443.1] **VOC Less H2O & Exempt Solvents** <=7 g/l [*Test Method*:calculated SCAQMD rule 443.1]

# **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 is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature exothermic reaction with production of intense heat and smoke.

## 10.5. Incompatible materials

Strong oxidizing agents

## 10.6. Hazardous decomposition products

Substance

None known.

**Condition** 

Refer to section 5.2 for hazardous decomposition products during combustion.

## **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:

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

#### **Skin Contact:**

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:

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

## **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 ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Polyester Resin	Ingestion	Rat	LD50 > 15,000 mg/kg
Polypropylene Glycol	Dermal	Rabbit	LD50 > 10,000 mg/kg
Polypropylene Glycol	Ingestion	Rat	LD50 > 2,000 mg/kg
Talc	Dermal		LD50 estimated to be > 5,000 mg/kg
Talc	Ingestion		LD50 estimated to be > 5,000 mg/kg
Polyoxypropylene Triol	Dermal	Rat	LD50 > 2,000 mg/kg
Polyoxypropylene Triol	Ingestion	Rat	LD50 > 2,500 mg/kg
Silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Silica	Inhalation-	Rat	LC50 > 0.691 mg/l
	Dust/Mist		
	(4 hours)		
Silica	Ingestion	Rat	LD50 > 5,110 mg/kg
o-Diethylbisaniline	Ingestion	Rat	LD50 1,901 mg/kg
BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY	Dermal	Rabbit	LD50 6,700 mg/kg
SILANE			
BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY	Inhalation-	Rat	LC50 > 7 mg/l
SILANE	Vapor (4		
	hours)		
BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY	Ingestion	Rat	LD50 13,100 mg/kg
SILANE			
SODIUM OXIDE	Ingestion		LD50 estimated to be 50 - 300 mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
Polypropylene Glycol	Rabbit	No significant irritation
Talc	Rabbit	No significant irritation
Polyoxypropylene Triol	Rabbit	No significant irritation
Silica	Rabbit	No significant irritation
o-Diethylbisaniline	Rabbit	Minimal irritation
BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY SILANE	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Serious Eye Damage/III itation		
Name	Species	Value
Polypropylene Glycol	Rabbit	No significant irritation
Talc	Rabbit	No significant irritation
Polyoxypropylene Triol	Rabbit	Mild irritant
Silica	Rabbit	No significant irritation
o-Diethylbisaniline	Rabbit	No significant irritation
BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY SILANE	Rabbit	No significant irritation

01/14/19

## **Skin Sensitization**

Name	Species	Value
Silica	Human	Not classified
	and	
	animal	

**Respiratory Sensitization** 

Name	Species	Value
Talc	Human	Not classified

**Germ Cell Mutagenicity** 

Name	Route	Value
Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic
Silica	In Vitro	Not mutagenic
o-Diethylbisaniline	In Vitro	Not mutagenic
BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY SILANE	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Talc	Inhalation	Rat	Some positive data exist, but the data are not
			sufficient for classification
Silica	Not	Mouse	Some positive data exist, but the data are not
	Specified		sufficient for classification
BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY	Dermal	Mouse	Some positive data exist, but the data are not
SILANE			sufficient for classification

## **Reproductive Toxicity**

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Talc	Ingestion	Not classified for development	Rat	NOAEL 1,600 mg/kg	during organogenesi s
Silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesi s

## Target Organ(s)

## **Specific Target Organ Toxicity - single exposure**

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

**Specific Target Organ Toxicity - repeated exposure** 

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Talc	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pulmonary fibrosis   respiratory system	Not classified	Rat	NOAEL 18 mg/m3	113 weeks
Silica	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure

#### **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.

# **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

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

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty and clean product containers may be disposed as non-hazardous waste. Consult your specific regulations and service providers to determine available options and requirements.

# **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:**

Dh	vsica	1 11	070	nda
rn	ASICA	1 11	чи	rne

Not applicable

#### Health Hazards

Not applicable

### 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.

01/14/19

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: 1 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.

 Document Group:
 10-8304-7
 Version Number:
 27.06

 Issue Date:
 01/14/19
 Supercedes Date:
 02/22/18

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued.3MMAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3Mproduct is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3Mproduct, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3Mproduct to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3Mprovides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information,3Mmakes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from3M

3M USA SDSs are available at www.3M.com



Date: February 20, 2019

# **Transport Information Document**

3M ID Number: 62-3549-6440-5
Product Description: 3M(TM) Scotch-Weld(TM) Urethane Adhesive EC-3549 B/A, Quart Kit, 6 per case
Transport Protective Service: PROTECTIVE SERVICE NOT REQUIRED
NMFC Item: 004620 NMFC Sub: 06 NMFC Class: 060.0
Flash Point (Closed-cup): 354°F/179°C
UNITED STATES DEPARTMENT OF TRANSPORTATION - GROUND (U.S. DOT, 49 CFR)
NOT REGULATED
UNITED STATES DEPARTMENT OF TRANSPORTATION - VESSEL (U.S. DOT, 49 CFR)
NOT REGULATED
INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)
NOT REGULATED
INTERNATIONAL MARITIME ORGANIZATION (IMO)
NOT REGULATED

The classification is authorized by the Competent Authority of the United States of America and may not meet the requirements of other competent authorities.

These transportation classifications are provided as a customer service. AS THE SHIPPER YOU REMAIN RESPONSIBLE FOR COMPLYING WITH ALL THE APPLICABLE LAWS AND REGULATIONS, INCLUDING PROPER TRANSPORTATION CLASSIFICATION AND PACKAGING. 3M's transportation classifications are based on product formulations, packaging, 3M policies and 3M's understanding of applicable current regulations and is valid for the original 3M package only. 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.