

# **Safety Data Sheet**

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# **SECTION 1: Identification**

### 1.1. Product identifier

3M<sup>TM</sup> Scotch-Weld<sup>TM</sup> Urethane Adhesive 3532 B/A, Part B

#### **Product Identification Numbers**

62-3532-8515-8 7010170296

## 1.2. Recommended use and restrictions on use

#### Recommended use

Structural adhesive

## 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

Skin Sensitizer: Category 1.

Reproductive Toxicity: Category 1B.

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

## 2.2. Label elements

## Signal word

Danger

## **Symbols**

Exclamation mark | Health Hazard |

#### **Pictograms**





#### **Hazard Statements**

May cause an allergic skin reaction. May damage fertility or the unborn child.

Causes damage to organs through prolonged or repeated exposure: respiratory system |

## **Precautionary Statements**

#### **Prevention:**

Obtain special instructions before use.

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

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

Wear protective gloves.

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 ON SKIN: Wash with plenty of soap and water.

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

Wash contaminated clothing before reuse.

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.

51% 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 (N.J.T.S. Reg. No. 04499600-7131)	Trade Secret*	40 - 70 Trade Secret *
Polypropylene glycol	25322-69-4	20 - 30 Trade Secret *
Talc	14807-96-6	15 - 25 Trade Secret *
Polyoxypropylene triol	25723-16-4	1 - 10 Trade Secret *
Amorphous silica	1318-02-1	1 - 5 Trade Secret *
2-Ethylhexanoic Acid	149-57-5	<= 0.2
Dibutyltin bis(2-ethylhexyl mercaptoacetate)	10584-98-2	<= 0.2

<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:**

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

## **Eye Contact:**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, 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 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

None inherent in this product.

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

SubstanceConditionCarbon monoxideDuring CombustionCarbon dioxideDuring CombustionOxides of NitrogenDuring CombustionToxic Vapor, Gas, ParticulateDuring 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. 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

Avoid skin contact with hot material. For industrial/occupational use only. Not for consumer sale or use. 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. 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.) Use personal protective equipment (gloves, respirators, etc.) as required.

## 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	<b>Additional Comments</b>
TIN, ORGANIC COMPOUNDS	10584-98-2	ACGIH	TWA(as Sn):0.1	SKIN, A4: Not class. as
			mg/m3;STEL(as Sn):0.2	human carcin
			mg/m3	
TIN, ORGANIC COMPOUNDS	10584-98-2	OSHA	TWA(as Sn):0.1 mg/m3	
Aluminum, insoluble compounds	1318-02-1	ACGIH	TWA(respirable fraction):1	A4: Not class. as human
_			mg/m3	carcin
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	
2-Ethylhexanoic Acid	149-57-5	ACGIH	TWA(inhalable fraction and	
			vapor):5 mg/m3	
Polypropylene glycol	25322-69-4	AIHA	TWA(as aerosol):10 mg/m3	

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

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#### 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

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.

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

Neoprene

Nitrile Rubber

## 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.

## Thermal hazards

Wear heat insulating gloves when handling hot material to prevent thermal burns.

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

## 9.1. Information on basic physical and chemical properties

General Physical Form: Liquid

Odor, Color, Grade:off-white, polyester odor.Odor thresholdNo Data AvailablePHNot Applicable

Melting point

No Data Available

**Boiling Point** >=250 °F

Flash Point >=200 °F [Test Method:Closed Cup]

Evaporation rateNot ApplicableFlammability (solid, gas)Not ApplicableFlammable Limits(LEL)No Data AvailableFlammable Limits(UEL)No Data AvailableVapor Pressure<=27 psia [@ 131 °F]</th>Vapor DensityNot ApplicableDensity1.31 g/ml

Specific Gravity 1.31 [Ref Std: WATER=1]

Solubility in WaterNegligibleSolubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data Available

3M<sup>TM</sup> Scotch-Weld<sup>TM</sup> Urethane Adhesive 3532 B/A, Part B 01/14/19

Autoignition temperatureNo Data AvailableDecomposition temperatureNo Data Available

Viscosity 10,000 - 40,000 centipoise

**Hazardous Air Pollutants** 0 % weight [*Test Method:*Calculated]

Molecular weight No Data Available

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

[Details: when used as intended with Part A]

# **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:**

May cause additional health effects (see below).

#### Skin Contact

Contact with the skin during product use is not expected to result in significant irritation. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

### **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.

May cause additional health effects (see below).

## **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.

## Reproductive/Developmental Toxicity:

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

### Carcinogenicity:

<u>Ingredient</u>	CAS No.	Class Description	Regulation
Generic: CAS NO S14807966D	14807-96-6	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 ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Polyester Resin (N.J.T.S. Reg. No. 04499600-7131)	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
Amorphous silica	Dermal	Rabbit	LD50 > 2,000 mg/kg
Amorphous silica	Inhalation- Dust/Mist	Rat	LC50 > 4.57 mg/l
Amorphous silica	(4 hours) Ingestion	Rat	LD50 > 5,000 mg/kg
2-Ethylhexanoic Acid	Dermal	Rat	LD50 > 2,000 mg/kg
2-Ethylhexanoic Acid	Inhalation-	Rat	LC50 > 3.54 mg/l
	Dust/Mist		_
	(4 hours)		
2-Ethylhexanoic Acid	Ingestion	Rat	LD50 1,600 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
Amorphous silica	Rabbit	No significant irritation
2-Ethylhexanoic Acid	Rabbit	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Polypropylene glycol	Rabbit	No significant irritation
Talc	Rabbit	No significant irritation
Polyoxypropylene triol	Rabbit	Mild irritant
Amorphous silica	Rabbit	Mild irritant
2-Ethylhexanoic Acid	Rabbit	Corrosive

## **Skin Sensitization**

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

**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
2-Ethylhexanoic Acid	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

# **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
2-Ethylhexanoic Acid	Ingestion	Toxic to female reproduction	Rat	NOAEL 300 mg/kg/day	1 generation
2-Ethylhexanoic Acid	Ingestion	Toxic to male reproduction	Rat	NOAEL 300 mg/kg/day	1 generation
2-Ethylhexanoic Acid	Ingestion	Toxic to development	Multiple animal species	NOAEL 100 mg/kg/day	during organogenesi s

## Target Organ(s)

Specific Target Organ Toxicity - single exposure

pecific ranger organ rowerty single exposure							
Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration	
2-Ethylhexanoic Acid	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for		NOAEL Not available		
			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	Not classified	Rat	NOAEL 18	113 weeks

		respiratory system			mg/m3	
2-Ethylhexanoic Acid	Ingestion	blood   liver	Not classified	Rat	NOAEL	13 weeks
					1,068	
					mg/kg/day	
2-Ethylhexanoic Acid	Ingestion	skin   kidney and/or	Not classified	Mouse	NOAEL	13 weeks
		bladder			3,139	
					mg/kg/day	

#### **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	
Not applicable	

Health Hazards	

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Reproductive toxicity

Respiratory or Skin Sensitization

Specific target organ toxicity (single or repeated exposure)

## 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.

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