



Safety Data Sheet

Copyright, 2025, 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: | 11-6418-5 | Version Number: | 12.00 |
| Issue Date: | 10/21/25 | Supersedes Date: | 11/22/23 |

Product identifier

3M™ Scotch-Weld™ Urethane Adhesive EC-3532 B/A

ID Number(s):

62-3532-6440-1, 70-0052-1003-7, 87-2500-0328-9, 87-2500-0329-7, 87-2500-0360-2, 87-2500-0409-7, 87-3300-0158-4, 87-3300-0186-5, 87-3300-0663-3, 87-3300-0685-6

7000000864, 7100023241, 7010399418, 7000058943, 7010401574, 7100203534, 7100229666, 7100289125

Recommended use

2-Part Urethane Adhesive, Industrial use

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:

11-6417-7, 11-6419-3

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES 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.

3M provides 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, 3M makes 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 from 3M.

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



Safety Data Sheet

Copyright, 2025, 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: 11-6417-7
Issue Date: 11/24/25

Version Number: 18.01
Supersedes Date: 10/21/25

SECTION 1: Identification

1.1. Product identifier

3M™ Scotch-Weld™ Urethane Adhesive EC-3532 B/A Part B

Product Identification Numbers

41-3588-1663-9, 41-3588-1702-5, 62-3532-8540-6
7000046482

1.2. Recommended use and restrictions on use

Recommended use

Base for 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

Skin Sensitizer: Category 1.

Reproductive Toxicity: Category 1B.

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.

Precautionary statements

Prevention:

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing vapors.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves.

Response:

IF ON SKIN: Wash with plenty of soap and water.
IF exposed or concerned: Get medical attention.
If skin irritation or rash occurs: Get medical attention.
Take off contaminated clothing and wash it before reuse.

Storage:

Store locked up.

Disposal:

Dispose of contents and container in accordance with applicable local, regional, national, and 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 - NJTS Reg No. 3176530002-5392P | Trade Secret* | 30 - 60 |
| Polypropylene Glycol | 25322-69-4 | 10 - 30 Trade Secret * |
| Talc | 14807-96-6 | 10 - 30 Trade Secret * |
| Polyoxypropylene Triol | 25723-16-4 | 3 - 7 |
| Silica | 7631-86-9 | < 5 |
| Zeolites | 1318-02-1 | 1 - 5 |
| o-Diethylbisaniline | 13680-35-8 | 0.5 - 1.5 Trade Secret * |
| 2-Ethylhexanoic Acid | 149-57-5 | 0.1 - 1 Trade Secret * |
| BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY SILANE | 3388-04-3 | 0.1 - 1 Trade Secret * |
| DIBUTYL TIN BIS(2-ETHYLHEXYL MERCAPTOACETATE) | 10584-98-2 | 0.1 - 1 Trade Secret * |
| HYDROGENATED CASTOR OIL | 8001-78-3 | < 1 |
| PM Acetate | 108-65-6 | < 0.99 |
| Sodium Oxide | 1313-59-3 | < 0.5 |

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

*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

Allergic skin reaction (redness, swelling, blistering, and itching).

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

Substance

Carbon monoxide
Carbon dioxide

Condition

During Combustion
During 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. Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing

chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS.

6.2. Environmental precautions

Avoid release to the environment.

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 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 | Additional Comments |
|--|------------|--------|---|--|
| TIN, ORGANIC COMPOUNDS, AS /SN/ | 10584-98-2 | OSHA | TWA(as Sn):0.1 mg/m3 | |
| Tin, organic compounds, as Sn | 10584-98-2 | ACGIH | TWA(as Sn):0.1 mg/m3;STEL(as Sn):0.2 mg/m3 | A4: Not class. as human carcin, Danger of cutaneous absorption |
| PM Acetate | 108-65-6 | AIHA | TWA:50 ppm | |
| Aluminum metal and insoluble compounds, respirable fraction | 1318-02-1 | ACGIH | TWA(respirable fraction):1 mg/m3 | A4: Not class. as human carcin |
| Silicates (less than 1% crystalline silica) talc (containing asbestos) | 14807-96-6 | OSHA | TWA - Use asbestos limits: | |
| Talc | 14807-96-6 | ACGIH | TWA(respirable fraction):2 mg/m3 | A4: Not class. as human carcin |
| Talc | 14807-96-6 | OSHA | TWA concentration(respirable):0.1 mg/m3(2.4 millions of particles/cu. ft.);TWA:20 millions of particles/cu. ft. | |
| 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 | |
| Inert or Nuisance Dust, Respirable fraction | 7631-86-9 | OSHA | 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) | |

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:

Safety Glasses with side shields

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 (e.g., spraying, high splash potential, etc.), then use of a protective apron may be necessary. See recommended glove material(s) for determining appropriate apron material(s). If a glove material is not available as an apron, polymer laminate is a suitable option.

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

| | |
|----------------|--------|
| Physical state | Liquid |
|----------------|--------|

| | |
|--|--|
| Specific Physical Form: | Paste |
| Color | Off-White |
| Odor | Moderate Polyester |
| Odor threshold | <i>No Data Available</i> |
| pH | <i>Not Applicable</i> |
| Melting point/Freezing point | <i>No Data Available</i> |
| Boiling point/Initial boiling point/Boiling range | ≥ 179 °C |
| Flash Point | ≥ 178.9 °C [<i>Test Method: Closed Cup</i>] |
| Evaporation rate | <i>Not Applicable</i> |
| Flammability | Not Applicable |
| Flammable Limits(LEL) | <i>Not Applicable</i> |
| Flammable Limits(UEL) | <i>Not Applicable</i> |
| Vapor Pressure | <i>Not Applicable</i> |
| Relative Vapor Density | <i>Not Applicable</i> |
| Density | 1.31 g/ml |
| Relative Density | 1.31 [<i>Ref Std: WATER=1</i>] |
| Water solubility | Nil |
| Solubility- non-water | <i>No Data Available</i> |
| Partition coefficient: n-octanol/ water | <i>No Data Available</i> |
| Autoignition temperature | <i>No Data Available</i> |
| Decomposition temperature | <i>No Data Available</i> |
| Kinematic Viscosity | 19,084 mm ² /sec |
| Volatile Organic Compounds | 11.4 g/l |
| Percent volatile | 0.9 % |
| VOC Less H₂O & Exempt Solvents | 11.4 g/l |
| Molecular weight | <i>No Data Available</i> |

| | |
|---------------------------------|-----------------------|
| Particle Characteristics | <i>Not Applicable</i> |
|---------------------------------|-----------------------|

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. 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:

May be harmful if swallowed.

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

May cause additional health effects (see below).

Additional Health Effects:

Reproductive/Developmental Toxicity:

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

Carcinogenicity:

| Ingredient | CAS No. | Class Description | Regulation |
|------------|------------|-------------------------------|---|
| Talc | 14807-96-6 | Grp. 2A: Probable 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 >2,000 - =5,000 mg/kg |
| Polyester Resin - NJTS Reg No. 3176530002-5392P | Ingestion | Rat | LD50 > 15,000 mg/kg |
| Polypropylene Glycol | Dermal | Rabbit | LD50 > 10,000 mg/kg |
| Polypropylene Glycol | Ingestion | Rat | LD50 > 1,000 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 |
| Zeolites | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| Zeolites | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 4.57 mg/l |
| Zeolites | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Silica | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Silica | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 0.691 mg/l |
| Silica | Ingestion | Rat | LD50 > 5,110 mg/kg |
| o-Diethylbisaniline | Dermal | Rat | LD50 > 2,000 mg/kg |
| o-Diethylbisaniline | Ingestion | Rat | LD50 1,736 mg/kg |
| HYDROGENATED CASTOR OIL | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY SILANE | Dermal | Rabbit | LD50 6,700 mg/kg |
| BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY SILANE | Inhalation-Vapor (4 hours) | Rat | LC50 > 7 mg/l |
| BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY SILANE | Ingestion | Rat | LD50 13,100 mg/kg |
| HYDROGENATED CASTOR OIL | Ingestion | Rat | LD50 > 10,000 mg/kg |
| Sodium Oxide | Ingestion | Professional judgement | LD50 estimated to be 50 - 300 mg/kg |
| PM Acetate | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| PM Acetate | Inhalation-Vapor (4 hours) | Rat | LC50 > 28.8 mg/l |
| PM Acetate | Ingestion | Rat | LD50 8,532 mg/kg |
| 2-Ethylhexanoic Acid | Dermal | Rat | LD50 > 2,000 mg/kg |
| 2-Ethylhexanoic Acid | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 3.54 mg/l |
| 2-Ethylhexanoic Acid | Ingestion | Rat | LD50 2,043 mg/kg |
| DIBUTYLTIN BIS(2-ETHYLHEXYL MERCAPTOACETATE) | Dermal | Rat | LD50 777 mg/kg |
| DIBUTYLTIN BIS(2-ETHYLHEXYL MERCAPTOACETATE) | Inhalation-Dust/Mist (4 hours) | Rat | LC50 0.94 mg/l |
| DIBUTYLTIN BIS(2-ETHYLHEXYL MERCAPTOACETATE) | Ingestion | Rat | LD50 396 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|-------------------|---------------------------|
| Polypropylene Glycol | Not available | No significant irritation |
| Talc | Rabbit | No significant irritation |
| Polyoxypropylene Triol | Rabbit | No significant irritation |
| Zeolites | Rabbit | No significant irritation |
| Silica | Rabbit | No significant irritation |
| o-Diethylbisaniline | Rabbit | No significant irritation |
| BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY SILANE | Rabbit | Minimal irritation |
| HYDROGENATED CASTOR OIL | Mouse | No significant irritation |
| Sodium Oxide | similar compounds | Corrosive |
| PM Acetate | Rabbit | No significant irritation |
| 2-Ethylhexanoic Acid | Rabbit | Mild irritant |
| DIBUTYLTIN BIS(2-ETHYLHEXYL MERCAPTOACETATE) | Rat | Irritant |

Serious Eye Damage/Irritation

| Name | Species | Value |
|--|-------------------|---------------------------|
| Polypropylene Glycol | Not available | Mild irritant |
| Talc | Rabbit | No significant irritation |
| Polyoxypropylene Triol | Rabbit | Mild irritant |
| Zeolites | Rabbit | Mild irritant |
| Silica | Rabbit | No significant irritation |
| o-Diethylbisaniiline | In vitro data | No significant irritation |
| BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY SILANE | Rabbit | No significant irritation |
| HYDROGENATED CASTOR OIL | Rabbit | Mild irritant |
| Sodium Oxide | similar compounds | Corrosive |
| PM Acetate | Rabbit | Mild irritant |
| 2-Ethylhexanoic Acid | Rabbit | Mild irritant |
| DIBUTYL TIN BIS(2-ETHYLHEXYL MERCAPTOACETATE) | Rabbit | Severe irritant |

Skin Sensitization

| Name | Species | Value |
|--|-------------------|----------------|
| Polypropylene Glycol | Human and animal | Not classified |
| Silica | Human and animal | Not classified |
| o-Diethylbisaniiline | Mouse | Not classified |
| BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY SILANE | similar compounds | Sensitizing |
| PM Acetate | Guinea pig | Not classified |
| 2-Ethylhexanoic Acid | Guinea pig | Not classified |
| DIBUTYL TIN BIS(2-ETHYLHEXYL MERCAPTOACETATE) | Guinea pig | Sensitizing |

Respiratory Sensitization

| Name | Species | Value |
|------|---------|----------------|
| Talc | Human | Not classified |

Germ Cell Mutagenicity

| Name | Route | Value |
|--|----------|--|
| Polypropylene Glycol | In Vitro | Not mutagenic |
| Talc | In Vitro | Not mutagenic |
| Talc | In vivo | Not mutagenic |
| Silica | In Vitro | Not mutagenic |
| o-Diethylbisaniiline | In Vitro | Not mutagenic |
| BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY SILANE | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| HYDROGENATED CASTOR OIL | In Vitro | Not mutagenic |
| PM Acetate | In Vitro | Not mutagenic |
| 2-Ethylhexanoic Acid | In Vitro | Not mutagenic |
| 2-Ethylhexanoic Acid | In vivo | Not mutagenic |
| DIBUTYL TIN BIS(2-ETHYLHEXYL MERCAPTOACETATE) | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| DIBUTYL TIN BIS(2-ETHYLHEXYL MERCAPTOACETATE) | In vivo | Mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|--|---------------|---------|--|
| Talc | Dermal | Human | Some positive data exist, but the data are not sufficient for classification |
| Talc | Inhalation | Rat | Carcinogenic |
| Silica | Not Specified | Mouse | Some positive data exist, but the data are not sufficient for classification |
| BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY SILANE | Dermal | Mouse | 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 organogenesis |
| 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 organogenesis |
| o-Diethylbisaniline | Ingestion | Not classified for development | Rat | NOAEL 15 mg/kg/day | during gestation |
| BETA-(3,4-EPOXYCYCLOHEXYL)ETHYLTRIMETHOXY SILANE | Ingestion | Not classified for development | Rabbit | NOAEL 0.27 mg/kg/day | during organogenesis |
| PM Acetate | Ingestion | Not classified for female reproduction | Rat | NOAEL 1,000 mg/kg/day | premating & during gestation |
| PM Acetate | Ingestion | Not classified for male reproduction | Rat | NOAEL 1,000 mg/kg/day | premating & during gestation |
| PM Acetate | Ingestion | Not classified for development | Rat | NOAEL 1,000 mg/kg/day | premating & during gestation |
| PM Acetate | Inhalation | Not classified for development | Rat | NOAEL 21.6 mg/l | during organogenesis |
| 2-Ethylhexanoic Acid | Ingestion | Not classified for female reproduction | Rat | NOAEL 800 mg/kg/day | 2 generation |
| 2-Ethylhexanoic Acid | Ingestion | Not classified for male reproduction | Rat | NOAEL 800 mg/kg/day | 2 generation |
| 2-Ethylhexanoic Acid | Ingestion | Toxic to development | Rat | NOAEL 100 mg/kg/day | during gestation |
| DIBUTYLTIN BIS(2-ETHYLHEXYL MERCAPTOACETATE) | Ingestion | Toxic to female reproduction | similar compounds | NOAEL Not available | premating into lactation |
| DIBUTYLTIN BIS(2-ETHYLHEXYL MERCAPTOACETATE) | Ingestion | Toxic to development | similar compounds | NOAEL Not available | during gestation |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|--------------|------------|------------------------|---|------------------------|---------------------|-------------------|
| Sodium Oxide | Inhalation | respiratory irritation | May cause respiratory irritation | Professional judgement | NOAEL Not available | |
| PM Acetate | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for | | NOAEL Not available | |

| | | | classification | | | |
|--|------------|-----------------------------------|--|------------------------|---------------------|--|
| PM Acetate | Ingestion | central nervous system depression | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL not available | |
| 2-Ethylhexanoic Acid | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |
| DIBUTYLTIN BIS(2-ETHYLHEXYL MERCAPTOACETATE) | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |
| DIBUTYLTIN BIS(2-ETHYLHEXYL MERCAPTOACETATE) | Ingestion | immune system | Causes damage to organs | similar compounds | 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 | Not classified | Rat | NOAEL 18 mg/m ³ | 113 weeks |
| Talc | Inhalation | respiratory system | Not classified | Rat | NOAEL 18 mg/m ³ | 113 weeks |
| Silica | Inhalation | respiratory system | Not classified | Human | NOAEL Not available | occupational exposure |
| Silica | Inhalation | silicosis | Not classified | Human | NOAEL Not available | occupational exposure |
| o-Diethylbisaniline | Ingestion | liver | Not classified | Rat | NOAEL 50 mg/kg/day | 90 days |
| o-Diethylbisaniline | Ingestion | heart | Not classified | Rat | NOAEL 50 mg/kg/day | 90 days |
| o-Diethylbisaniline | Ingestion | endocrine system | Not classified | Rat | NOAEL 50 mg/kg/day | 90 days |
| o-Diethylbisaniline | Ingestion | hematopoietic system | Not classified | Rat | NOAEL 50 mg/kg/day | 90 days |
| o-Diethylbisaniline | Ingestion | immune system | Not classified | Rat | NOAEL 50 mg/kg/day | 90 days |
| o-Diethylbisaniline | Ingestion | nervous system | Not classified | Rat | NOAEL 50 mg/kg/day | 90 days |
| o-Diethylbisaniline | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL 50 mg/kg/day | 90 days |
| PM Acetate | Inhalation | kidney and/or bladder | Not classified | Rat | NOAEL 16.2 mg/l | 9 days |
| PM Acetate | Inhalation | olfactory system | Not classified | Mouse | LOAEL 1.62 mg/l | 9 days |
| PM Acetate | Inhalation | blood | Not classified | Multiple animal species | NOAEL 16.2 mg/l | 9 days |
| PM Acetate | Ingestion | endocrine system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 44 days |
| 2-Ethylhexanoic Acid | Ingestion | hematopoietic system | Not classified | Rat | NOAEL 917 mg/kg/day | 13 weeks |
| 2-Ethylhexanoic Acid | Ingestion | liver | Not classified | Rat | NOAEL 917 mg/kg/day | 13 weeks |
| 2-Ethylhexanoic Acid | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL 917 mg/kg/day | 13 weeks |
| 2-Ethylhexanoic Acid | Ingestion | heart | Not classified | Rat | NOAEL 917 mg/kg/day | 13 weeks |
| 2-Ethylhexanoic Acid | Ingestion | endocrine system | Not classified | Rat | NOAEL 917 mg/kg/day | 13 weeks |
| 2-Ethylhexanoic Acid | Ingestion | gastrointestinal tract | Not classified | Rat | NOAEL 917 mg/kg/day | 13 weeks |
| 2-Ethylhexanoic Acid | Ingestion | bone, teeth, nails, and/or hair | Not classified | Rat | NOAEL 917 mg/kg/day | 13 weeks |
| 2-Ethylhexanoic Acid | Ingestion | immune system | Not classified | Rat | NOAEL 917 | 13 weeks |

| | | | | | mg/kg/day | |
|--|-----------|--------------------|--|-------------------|---------------------|----------|
| 2-Ethylhexanoic Acid | Ingestion | muscles | Not classified | Rat | NOAEL 917 mg/kg/day | 13 weeks |
| 2-Ethylhexanoic Acid | Ingestion | nervous system | Not classified | Rat | NOAEL 917 mg/kg/day | 13 weeks |
| 2-Ethylhexanoic Acid | Ingestion | eyes | Not classified | Rat | NOAEL 917 mg/kg/day | 13 weeks |
| 2-Ethylhexanoic Acid | Ingestion | respiratory system | Not classified | Rat | NOAEL 917 mg/kg/day | 13 weeks |
| 2-Ethylhexanoic Acid | Ingestion | vascular system | Not classified | Rat | NOAEL 917 mg/kg/day | 13 weeks |
| DIBUTYLTIN BIS(2-ETHYLHEXYL MERCAPTOACETATE) | Ingestion | immune system | Causes damage to organs through prolonged or repeated exposure | similar compounds | NOAEL Not available | 28 days |
| DIBUTYLTIN BIS(2-ETHYLHEXYL MERCAPTOACETATE) | Ingestion | liver | Causes damage to organs through prolonged or repeated exposure | similar compounds | NOAEL Not available | 2 weeks |

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

Reproductive toxicity

Respiratory or Skin Sensitization

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:** 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: 11-6417-7

Version Number: 18.01

Issue Date: 11/24/25

Supersedes Date: 10/21/25

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES 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.

3M provides 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, 3M makes 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 from 3M.

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



Safety Data Sheet

Copyright, 2025, 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: 11-6419-3
Issue Date: 11/24/25

Version Number: 16.02
Supersedes Date: 11/24/25

SECTION 1: Identification

1.1. Product identifier

3M™ Scotch-Weld™ Urethane Adhesive EC-3532 B/A Part A

Product Identification Numbers

41-3588-1664-7, 41-3588-1703-3, 62-3632-8540-4
7000046495

1.2. Recommended use and restrictions on use

Recommended use

Accelerator for 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

Skin Corrosion/Irritation: Category 2.

Serious Eye Damage/Irritation: Category 2A.

Respiratory Sensitizer: Category 1.

Skin Sensitizer: Category 1.

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

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

2.2. Label elements

Signal word

Danger

Symbols

Exclamation mark | Health Hazard |

Pictograms**Hazard Statements**

Causes skin irritation.

Causes serious eye 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 vapors.

Wash exposed skin thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

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

Wear protective gloves and eye protection.

In case of inadequate ventilation wear respiratory protection.

Response:

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

IF INHALED: Call a POISON CENTER or doctor if you feel unwell.

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

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

Continue rinsing.

Get medical attention if you feel unwell.

If eye irritation persists or if skin irritation or rash occurs: Get medical attention.

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

Take off contaminated clothing and wash it before reuse.

Storage:

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

Store locked up.

Disposal:

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

Supplemental Information:

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

40% of the mixture consists of ingredients of unknown acute oral toxicity.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|---|---------------|---------|
| Urethane Prepolymer - N.J.T.S Reg No. 04499600- | Trade Secret* | 30 - 60 |

| | | |
|--|------------|------------------------|
| 5770P | | |
| Polymethylene Polyphenylene Isocyanate | 9016-87-9 | 10 - 30 Trade Secret * |
| Talc | 14807-96-6 | 10 - 30 Trade Secret * |
| Diphenylmethane Diisocyanate (MDI) | 26447-40-5 | 5 - 10 Trade Secret * |
| Silica | 7631-86-9 | < 5 |
| SODIUM OXIDE | 1313-59-3 | < 1 |

*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:

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

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Allergic respiratory reaction (difficulty breathing, wheezing, cough, and tightness of chest). Allergic skin reaction (redness, swelling, blistering, and itching). Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

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

Substance

Carbon monoxide
Carbon dioxide
Hydrogen Cyanide
Oxides of Nitrogen

Condition

During Combustion
During Combustion
During Combustion
During 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. Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS.

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 | Additional Comments |
|--|-------------------|---------------|-----------------------------------|--------------------------------|
| Silicates (less than 1% crystalline silica) talc (containing asbestos) | 14807-96-6 | OSHA | TWA - Use asbestos limits: | |
| Talc | 14807-96-6 | ACGIH | TWA(respirable fraction):2 mg/m3 | A4: Not class. as human carcin |
| Talc | 14807-96-6 | OSHA | TWA concentration(respirable):0.1 | |

| | | | | |
|--|-----------|------|--|--|
| | | | mg/m ³ (2.4 millions of particles/cu. ft.);TWA:20 millions of particles/cu. ft. | |
| Inert or Nuisance Dust, Respirable fraction | 7631-86-9 | OSHA | TWA(as total dust):50 millions of particles/cu. ft.(15 mg/m ³);TWA(respirable fraction):15 millions of particles/cu. ft.(5 mg/m ³) | |

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:

Safety Glasses with side shields

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.

For prolonged or repeated contact, gloves made from the following material(s) are recommended (breakthrough times are >4 hours): Butyl Rubber, Natural Rubber, Neoprene, Nitrile Rubber, Polyvinyl Chloride

Any glove recommended for prolonged/repeated contact is also suitable for short-term/splash contact.

If this product is used in a manner that presents a higher potential for exposure (e.g., spraying, high splash potential, etc.), then use of a protective apron may be necessary. See recommended glove material(s) for determining appropriate apron material(s). If a glove material is not available as an apron, polymer laminate is a suitable option.

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

Half facepiece or full facepiece supplied-air respirator

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

| | |
|---|--|
| Physical state | Liquid |
| Specific Physical Form: | Paste |
| Color | Brown |
| Odor | Slight Urethane |
| Odor threshold | <i>No Data Available</i> |
| pH | <i>Not Applicable</i> |
| Melting point/Freezing point | <i>No Data Available</i> |
| Boiling point/Initial boiling point/Boiling range | $\geq 186^{\circ}\text{C}$ |
| Flash Point | $\geq 186.1^{\circ}\text{C}$ [Test Method: Closed Cup] |
| Evaporation rate | <i>Not Applicable</i> |
| Flammability | Not Applicable |
| Flammable Limits(LEL) | <i>Not Applicable</i> |
| Flammable Limits(UEL) | <i>Not Applicable</i> |
| Vapor Pressure | <i>Not Applicable</i> |
| Relative Vapor Density | <i>Not Applicable</i> |
| Density | 1.34 g/ml |
| Relative Density | 1.34 [Ref Std: WATER=1] |
| Water solubility | Slight (less than 10%) |
| Solubility- non-water | <i>No Data Available</i> |
| Partition coefficient: n-octanol/ water | <i>No Data Available</i> |
| Autoignition temperature | <i>No Data Available</i> |
| Decomposition temperature | <i>No Data Available</i> |
| Kinematic Viscosity | 17,537 mm ² /sec |
| Volatile Organic Compounds | <i>Not Applicable</i> |
| Percent volatile | 0 % weight |
| VOC Less H ₂ O & Exempt Solvents | <i>Not Applicable</i> |
| Molecular weight | <i>No Data Available</i> |

| | |
|--------------------------|-----------------------|
| Particle Characteristics | <i>Not Applicable</i> |
|--------------------------|-----------------------|

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

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
Strong acids
Strong bases
Strong oxidizing agents

10.6. Hazardous decomposition products

| <u>Substance</u> | <u>Condition</u> |
|------------------|------------------|
| 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 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.

Eye 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:

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 |
| 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 (4 hours) | Rat | LC50 0.368 mg/l |
| Polymethylene Polyphenylene Isocyanate | Ingestion | Rat | LD50 31,600 mg/kg |
| Diphenylmethane Diisocyanate (MDI) | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Diphenylmethane Diisocyanate (MDI) | Inhalation-Dust/Mist (4 hours) | Rat | LC50 0.368 mg/l |
| Diphenylmethane Diisocyanate (MDI) | Ingestion | Rat | LD50 31,600 mg/kg |
| Silica | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Silica | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 0.691 mg/l |
| Silica | Ingestion | Rat | LD50 > 5,110 mg/kg |
| SODIUM OXIDE | Ingestion | Professional judgement | LD50 estimated to be 50 - 300 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|-------------------------|---------------------------|
| Talc | Rabbit | No significant irritation |
| Polymethylene Polyphenylene Isocyanate | official classification | Irritant |
| Diphenylmethane Diisocyanate (MDI) | official classification | Irritant |
| Silica | Rabbit | No significant irritation |
| SODIUM OXIDE | similar compounds | Corrosive |

Serious Eye Damage/Irritation

| Name | Species | Value |
|--|-------------------------|---------------------------|
| Talc | Rabbit | No significant irritation |
| Polymethylene Polyphenylene Isocyanate | official classification | Severe irritant |
| Diphenylmethane Diisocyanate (MDI) | official classification | Severe irritant |
| Silica | Rabbit | No significant irritation |
| SODIUM OXIDE | similar compounds | Corrosive |

Skin Sensitization

| Name | Species | Value |
|--|---------|-------------|
| Polymethylene Polyphenylene Isocyanate | Mouse | Sensitizing |

| | | |
|------------------------------------|------------------|----------------|
| Diphenylmethane Diisocyanate (MDI) | Mouse | Sensitizing |
| Silica | Human and animal | Not classified |

Respiratory Sensitization

| Name | Species | Value |
|--|---------|----------------|
| Talc | Human | Not classified |
| Polymethylene Polyphenylene Isocyanate | Human | Sensitizing |
| Diphenylmethane Diisocyanate (MDI) | Human | Sensitizing |

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 |
| Diphenylmethane Diisocyanate (MDI) | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Silica | In Vitro | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|--|---------------|---------|--|
| Talc | Dermal | Human | Some positive data exist, but the data are not sufficient for classification |
| Talc | Inhalation | Rat | Carcinogenic |
| Polymethylene Polyphenylene 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 |
| Silica | Not Specified | Mouse | 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 organogenesis |
| Polymethylene Polyphenylene Isocyanate | Inhalation | Not classified for development | Rat | NOAEL 0.004 mg/l | during organogenesis |
| Diphenylmethane Diisocyanate (MDI) | Inhalation | Not classified for development | Rat | NOAEL 0.004 mg/l | during organogenesis |
| 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 organogenesis |

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 classification | NOAEL Not available | |
| Diphenylmethane Diisocyanate (MDI) | Inhalation | respiratory irritation | May cause respiratory irritation | official classification | NOAEL Not available | |
| SODIUM OXIDE | Inhalation | respiratory irritation | May cause respiratory irritation | Professional judgement | 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 | Not classified | Rat | NOAEL 18 mg/m3 | 113 weeks |
| Talc | Inhalation | respiratory system | Not classified | Rat | NOAEL 18 mg/m3 | 113 weeks |
| Polymethylene Polyphenylene Isocyanate | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.004 mg/l | 13 weeks |
| Diphenylmethane Diisocyanate (MDI) | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.004 mg/l | 13 weeks |
| Silica | Inhalation | respiratory system | Not classified | Human | NOAEL Not available | occupational exposure |
| Silica | Inhalation | 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.

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

Respiratory or Skin Sensitization

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):**Inгредиент**

Polymethylene Polyphenylene Isocyanate

C.A.S. No

9016-87-9

% by Wt

Trade Secret 10 - 30

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:** 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: 11-6419-3

Version Number: 16.02

Issue Date: 11/24/25**Supersedes Date:** 11/24/25

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES 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.

3M provides 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, 3M makes 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 from 3M.

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