

Safety Data Sheet

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Product identifier 3M(tm) Scotch-Weld(tm) 7240 B/A

ID Number(s):

UU-0128-1599-7

7100331273

Recommended use Structural adhesive

Supplier's details

MANUFACTURER:	3M
DIVISION:	3M France
	Industrial Adhesives and Tapes 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:

32-5808-4, 35-9443-9

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Issue Date:	03/30/22	Supercedes Date:	Initial Issue

SECTION 1: Identification

1.1. Product identifier 3M(tm) Scotch-Weld(tm) 7240 B/A FR : Part A

1.2. Recommended use and restrictions on use

Recommended use Industrial use

1.3. Supplier's details	
MANUFACTURER:	3M
DIVISION:	3M France
	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

Serious Eye Damage/Irritation: Category 1. Skin Corrosion/Irritation: Category 1B. Skin Sensitizer: Category 1A. Reproductive Toxicity: Category 2. Specific Target Organ Toxicity (single exposure): Category 1. Specific Target Organ Toxicity (single exposure): Category 3.

2.2. Label elements Signal word Danger

Symbols Corrosion | Exclamation mark | Health Hazard |

Pictograms



Hazard Statements

Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause drowsiness or dizziness. Suspected of damaging fertility or the unborn child.

Causes damage to organs: blood or blood-forming organs

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. Use only outdoors or in a well-ventilated area. Wear protective gloves, protective clothing, 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 ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see Notes to Physician on this label).

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.

Notes to Physician:

Overexposure to this product may result in methemoglobinemia. Methemoglobinemia may be clinically suspected by the presence of clinical "cyanosis" in the presence of a normal PaO2 (as obtained by arterial blood gases). Routine pulse oximetry may be inaccurate for monitoring oxygen saturation in the presence of methemoglobinemia, and should not be used to make the diagnosis of this disorder. If the patient is symptomatic or if the methemoglobin level is >20%, specific therapy with methylene blue should be considered as part of the medical management.

2.3. Hazards not otherwise classified

May cause chemical gastrointestinal burns.

Supplemental Information:

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

5% of the mixture consists of ingredients of unknown acute dermal toxicity. 77% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
FATTY ACIDS, C18-UNSATD., DIMERS,	68911-25-1	30 - 50 Trade Secret *
POLYMERS WITH 3,3'-[OXYBIS(2,1-		
ETHANEDIYLOXY)]BIS[1-PROPANAMINE]		
Alumina Trihydrate	21645-51-2	10 - 30 Trade Secret *
2-PROPENENITRILE, POLYMER WITH 1,3-	68683-29-4	10 - 20 Trade Secret *
BUTADIENE, 1-CYANO-1-METHYL-4-OXO-4-[[2-		
(1-PIPERAZINYL)ETHYL]AMINO]BUTYL-		
TERMINATED		
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE	4246-51-9	1 - 8 Trade Secret *
GLYCOL		
Tris(2,4,6-dimethylaminomonomethyl)phenol	90-72-2	3 - 7 Trade Secret *
2-ETHYL-4-METHYL-IMIDAZOLE	931-36-2	1 - 5 Trade Secret *
Nitric acid, calcium salt, tetrahydrate	13477-34-4	1 - 3 Trade Secret *
Oxide glass chemicals	65997-17-3	1 - 3 Trade Secret *
Siloxanes and Silicones, di-Me, reaction products with	67762-90-7	1 - 3 Trade Secret *
silica		
BIS[(DIMETHYLAMINO)METHYL]PHENOL	71074-89-0	0.5 - 1.5 Trade Secret *
N-aminoethylpiperazine	140-31-8	< 1 Trade Secret *

*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 flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Get immediate medical attention. Wash clothing before reuse.

Eye Contact:

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

If Swallowed:

Rinse mouth. Do not induce vomiting. Get immediate medical attention.

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

Skin burns (localized redness, swelling, itching, intense pain, blistering, and tissue destruction). Allergic skin reaction (redness, swelling, blistering, and itching). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness). Target organ effects. See Section 11 for additional details.

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

Overexposure to this product may result in methemoglobinemia. Methemoglobinemia may be clinically suspected by the presence of clinical "cyanosis" in the presence of a normal PaO2 (as obtained by arterial blood gases). Routine pulse oximetry may be inaccurate for monitoring oxygen saturation in the presence of methemoglobinemia, and should not be used to make the diagnosis of this disorder. If the patient is symptomatic or if the methemoglobin level is >20%, specific therapy with methylene blue should be considered as part of the medical management.

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

<u>Substance</u>	<u>Condition</u>
Amine Compounds	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Oxides of Nitrogen	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. 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.

6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. 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 in a well-ventilated place. Keep container tightly closed. Store away from heat. Store away from acids. Store away from strong bases. 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
Aluminum, insoluble compounds	21645-51-2	ACGIH	TWA(respirable fraction):1	A4: Not class. as human
			mg/m3	carcin
DUST, INERT OR NUISANCE	21645-51-2	OSHA	TWA(as total dust):15	
			mg/m3;TWA(as total dust):50	
			millions of particles/cu. ft.(15	
			mg/m3);TWA(respirable	
			fraction):5	
			mg/m3;TWA(respirable	
			fraction):15 millions of	
			particles/cu. ft.(5 mg/m3)	
Oxide glass chemicals	65997-17-3	Manufacturer	TWA(as non-fibrous,	
		determined	respirable)(8 hours):3	
			mg/m3;TWA(as non-fibrous,	
			inhalable fraction)(8 hours):10	
			mg/m3	
SILICA, AMORPHOUS	67762-90-7	OSHA	TWA:20 millions of	
			particles/cu. ft.;TWA	
			concentration:0.8 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: Full Face Shield 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

Appearance	-
Physical state	Solid
Color	Off-White
Specific Physical Form:	Paste
Odor	Amine
Odor threshold	No Data Available
рН	No Data Available
Melting point	No Data Available
Boiling Point	No Data Available
Flash Point	>=100 °C
Evaporation rate	Not Applicable
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	Not Applicable
Flammable Limits(UEL)	Not Applicable
Vapor Pressure	Not Applicable
Vapor Density	Not Applicable
Density	No Data Available
Specific Gravity	1.12 [<i>Ref Std</i> :WATER=1]
Solubility In Water	No Data Available
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	No Data Available
Decomposition temperature	No Data Available
Viscosity	90 - 200 Pa-s [@ 23 °C]
Volatile Organic Compounds	No Data Available
Percent volatile	No Data Available
VOC Less H2O & Exempt Solvents	No Data Available

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

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 acids Strong bases Strong oxidizing agents

10.6. Hazardous decomposition products

<u>Substance</u>

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:

Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

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

Eye Contact:

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Ingestion:

May be harmful if swallowed.

Gastrointestinal Corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Methemoglobinemia: Signs/symptoms may include headache, dizziness, nausea, difficulty breathing, and generalized weakness.

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Reproductive/Developmental Toxicity:

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

Additional Information:

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

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	Inhalation- Dust/Mist(4 hr)		No data available; calculated ATE >12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >2,000 - \leq 5,000 mg/kg
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1-ETHANEDIYLOXY)]BIS[1- PROPANAMINE]	Dermal	Rat	LD50 > 2,000 mg/kg
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1-ETHANEDIYLOXY)]BIS[1- PROPANAMINE]	Ingestion	Rat	LD50 > 2,000 mg/kg
Alumina Trihydrate	Dermal		LD50 estimated to be > 5,000 mg/kg
Alumina Trihydrate	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Alumina Trihydrate	Ingestion	Rat	LD50 > 5,000 mg/kg
2-PROPENENITRILE, POLYMER WITH 1,3-BUTADIENE, 1- CYANO-1-METHYL-4-OXO-4-[[2-(1- PIPERAZINYL)ETHYL]AMINO]BUTYL-TERMINATED	Dermal	Rabbit	LD50 > 3,000 mg/kg
2-PROPENENITRILE, POLYMER WITH 1,3-BUTADIENE, 1- CYANO-1-METHYL-4-OXO-4-[[2-(1- PIPERAZINYL)ETHYL]AMINO]BUTYL-TERMINATED	Ingestion	Rat	LD50 > 15,300 mg/kg
Tris(2,4,6-dimethylaminomonomethyl)phenol	Dermal	Rat	LD50 1,280 mg/kg
Tris(2,4,6-dimethylaminomonomethyl)phenol	Ingestion	Rat	LD50 1,000 mg/kg
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GLYCOL	Dermal	Rabbit	LD50 2,500 mg/kg
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GLYCOL	Ingestion	Rat	LD50 3,160 mg/kg
2-ETHYL-4-METHYL-IMIDAZOLE	Ingestion	Rat	LD50 681 mg/kg
Nitric acid, calcium salt, tetrahydrate	Ingestion	Rat	LD50 >300, <2000 mg/kg
Nitric acid, calcium salt, tetrahydrate	Dermal	similar compoun ds	LD50 > 2,000 mg/kg
Oxide glass chemicals	Dermal		LD50 estimated to be > 5,000 mg/kg
Oxide glass chemicals	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Siloxanes and Silicones, di-Me, reaction products with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Siloxanes and Silicones, di-Me, reaction products with silica	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Rat	LD50 > 5,110 mg/kg
BIS[(DIMETHYLAMINO)METHYL]PHENOL	Ingestion		LD50 estimated to be 300 - 2,000 mg/kg
N-aminoethylpiperazine	Dermal	Rabbit	LD50 865 mg/kg
N-aminoethylpiperazine	Ingestion	Rat	LD50 1,470 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'- [OXYBIS(2,1-ETHANEDIYLOXY)]BIS[1-PROPANAMINE]	Rat	Irritant
Alumina Trihydrate	Rabbit	No significant irritation
2-PROPENENITRILE, POLYMER WITH 1,3-BUTADIENE, 1-CYANO-1- METHYL-4-OXO-4-[[2-(1-PIPERAZINYL)ETHYL]AMINO]BUTYL- TERMINATED	Rabbit	Irritant
Tris(2,4,6-dimethylaminomonomethyl)phenol	Rabbit	Corrosive
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GLYCOL	Rabbit	Corrosive
2-ETHYL-4-METHYL-IMIDAZOLE	Rabbit	Corrosive
Nitric acid, calcium salt, tetrahydrate	similar compoun ds	No significant irritation
Oxide glass chemicals	Professio nal judgeme nt	No significant irritation
Siloxanes and Silicones, di-Me, reaction products with silica	Rabbit	No significant irritation
BIS[(DIMETHYLAMINO)METHYL]PHENOL	similar compoun ds	Corrosive
N-aminoethylpiperazine	Rabbit	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-	In vitro	Severe irritant
[OXYBIS(2,1-ETHANEDIYLOXY)]BIS[1-PROPANAMINE]	data	
Alumina Trihydrate	Rabbit	No significant irritation
2-PROPENENITRILE, POLYMER WITH 1,3-BUTADIENE, 1-CYANO-1- METHYL-4-OXO-4-[[2-(1-PIPERAZINYL)ETHYL]AMINO]BUTYL-	Rabbit	Mild irritant
TERMINATED	D 111	
Tris(2,4,6-dimethylaminomonomethyl)phenol	Rabbit	Corrosive
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GLYCOL	similar	Corrosive
	health	
	hazards	
2-ETHYL-4-METHYL-IMIDAZOLE	Rabbit	Corrosive
Nitric acid, calcium salt, tetrahydrate	Rabbit	Corrosive
Oxide glass chemicals	Professio	No significant irritation
•	nal	
	judgeme	
	nt	
Siloxanes and Silicones, di-Me, reaction products with silica	Rabbit	No significant irritation
BIS[(DIMETHYLAMINO)METHYL]PHENOL	similar	Corrosive
	compoun	
	ds	
N-aminoethylpiperazine	Rabbit	Corrosive

Skin Sensitization

Name	Species	Value
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-	Guinea	Sensitizing
[OXYBIS(2,1-ETHANEDIYLOXY)]BIS[1-PROPANAMINE]	pig	
Alumina Trihydrate	Guinea	Not classified
	pig	
2-PROPENENITRILE, POLYMER WITH 1,3-BUTADIENE, 1-CYANO-1-	Guinea	Sensitizing
METHYL-4-OXO-4-[[2-(1-PIPERAZINYL)ETHYL]AMINO]BUTYL-	pig	
TERMINATED		
Tris(2,4,6-dimethylaminomonomethyl)phenol	Guinea	Not classified
	pig	
2-ETHYL-4-METHYL-IMIDAZOLE	Mouse	Sensitizing

Nitric acid, calcium salt, tetrahydrate	similar	Not classified
	compoun	
	ds	
Siloxanes and Silicones, di-Me, reaction products with silica	Human	Not classified
	and	
	animal	
N-aminoethylpiperazine	Guinea	Sensitizing
	pig	

Respiratory Sensitization

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

Germ Cell Mutagenicity

Name	Route	Value
	X XY'	
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'- [OXYBIS(2,1-ETHANEDIYLOXY)]BIS[1-PROPANAMINE]	In Vitro	Not mutagenic
Tris(2,4,6-dimethylaminomonomethyl)phenol	In Vitro	Not mutagenic
2-ETHYL-4-METHYL-IMIDAZOLE	In Vitro	Not mutagenic
Nitric acid, calcium salt, tetrahydrate	In Vitro	Not mutagenic
Oxide glass chemicals	In Vitro	Some positive data exist, but the data are not sufficient for classification
Siloxanes and Silicones, di-Me, reaction products with silica	In Vitro	Not mutagenic
N-aminoethylpiperazine	In vivo	Not mutagenic
N-aminoethylpiperazine	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Alumina Trihydrate	Not	Multiple	Not carcinogenic
	Specified	animal	
	-	species	
Oxide glass chemicals	Inhalation	Multiple	Some positive data exist, but the data are not
		animal	sufficient for classification
		species	
Siloxanes and Silicones, di-Me, reaction products with silica	Not	Mouse	Some positive data exist, but the data are not
•	Specified		sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1- ETHANEDIYLOXY)]BIS[1- PROPANAMINE]	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1- ETHANEDIYLOXY)]BIS[1- PROPANAMINE]	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	29 days
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1- ETHANEDIYLOXY)]BIS[1- PROPANAMINE]	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
Alumina Trihydrate	Ingestion	Not classified for development	Rat	NOAEL 768 mg/kg/day	during organogenesi s
2-ETHYL-4-METHYL-IMIDAZOLE	Ingestion	Not classified for female reproduction	Rat	NOAEL 150 mg/kg/day	premating into lactation
2-ETHYL-4-METHYL-IMIDAZOLE	Ingestion	Not classified for male reproduction	Rat	NOAEL 150 mg/kg/day	29 days
2-ETHYL-4-METHYL-IMIDAZOLE	Ingestion	Not classified for development	Rat	NOAEL 230 mg/kg/day	during gestation

Nitric acid, calcium salt, tetrahydrate	Ingestion	Not classified for female reproduction	similar compoun ds	NOAEL 1,500 mg/kg/day	premating into lactation
Nitric acid, calcium salt, tetrahydrate	Ingestion	Not classified for male reproduction	similar compoun ds	NOAEL 1,500 mg/kg/day	28 days
Nitric acid, calcium salt, tetrahydrate	Ingestion	Not classified for development	similar compoun ds	NOAEL 1,500 mg/kg/day	premating into lactation
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesi s
N-aminoethylpiperazine	Ingestion	Not classified for female reproduction	Rat	NOAEL 598 mg/kg/day	premating & during gestation
N-aminoethylpiperazine	Ingestion	Not classified for male reproduction	Rat	NOAEL 409 mg/kg/day	32 days
N-aminoethylpiperazine	Ingestion	Toxic to development	Rabbit	NOAEL 75 mg/kg/day	during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
FATTY ACIDS, C18- UNSATD., DIMERS, POLYMERS WITH 3,3'- [OXYBIS(2,1- ETHANEDIYLOXY)]BIS[1-PROPANAMINE]	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	Irritation Positive	
FATTY ACIDS, C18- UNSATD., DIMERS, POLYMERS WITH 3,3'- [OXYBIS(2,1- ETHANEDIYLOXY)]BIS[1-PROPANAMINE]	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Rat	NOAEL Not available	
2-PROPENENITRILE, POLYMER WITH 1,3- BUTADIENE, 1-CYANO- 1-METHYL-4-OXO-4-[[2- (1- PIPERAZINYL)ETHYL]A MINO]BUTYL- TERMINATED	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
Tris(2,4,6- dimethylaminomonomethyl)phenol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GLYCOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
2-ETHYL-4-METHYL- IMIDAZOLE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Nitric acid, calcium salt, tetrahydrate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Nitric acid, calcium salt, tetrahydrate	Ingestion	methemoglobinemi a	Causes damage to organs	Human	NOAEL Not available	environmental exposure
N-aminoethylpiperazine	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
FATTY ACIDS, C18- UNSATD., DIMERS, POLYMERS WITH 3,3'- [OXYBIS(2,1- ETHANEDIYLOXY)]BIS [1-PROPANAMINE]	Ingestion	heart skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system liver immune system muscles nervous system eyes kidney and/or bladder respiratory system vascular system	Not classified	Rat	NOAEL 1,000 mg/kg/day	29 days
Tris(2,4,6- dimethylaminomonomethy l)phenol	Dermal	skin liver nervous system auditory system hematopoietic system eyes	Not classified	Rat	NOAEL 125 mg/kg/day	28 days
2-ETHYL-4-METHYL- IMIDAZOLE	Ingestion	heart hematopoietic system liver kidney and/or bladder respiratory system skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair immune system muscles nervous system eyes vascular system	Not classified	Rat	NOAEL 230 mg/kg/day	90 days
Nitric acid, calcium salt, tetrahydrate	Ingestion	heart skin endocrine system bone, teeth, nails, and/or hair hematopoietic system liver immune system nervous system eyes kidney and/or bladder respiratory system vascular system	Not classified	similar compoun ds	NOAEL 1,500 mg/kg/day	28 days
Oxide glass chemicals	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
Siloxanes and Silicones, di-Me, reaction products with silica	Inhalation	respiratory system silicosis	Not classified	Human	NOAEL Not available	occupational exposure
N-aminoethylpiperazine	Dermal	skin	Not classified	Rat	NOAEL 100 mg/kg/day	29 days
N-aminoethylpiperazine	Dermal	hematopoietic system nervous system kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	29 days
N-aminoethylpiperazine	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 0.2 mg/m3	13 weeks
N-aminoethylpiperazine	Inhalation	hematopoietic system eyes kidney and/or bladder	Not classified	Rat	NOAEL 53.8 mg/m3	13 weeks
N-aminoethylpiperazine	Ingestion	heart endocrine system hematopoietic	Not classified	Rat	NOAEL 598 mg/kg/day	28 days

Specific Target Organ Toxicity - repeated exposure

system liver nervous system	
kidney and/or	
bladder	

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 waste product 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

Hazard Not Otherwise Classified (HNOC)

Reproductive toxicity

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):

Ingredient	<u>C.A.S. No</u>	<u>% by Wt</u>
Nitric acid, calcium salt, tetrahydrate (NITRATE	13477-34-4	Trade Secret 1 - 3
COMPOUNDS (WATER DISSOCIABLE;		
REPORTABLE ONLY WHEN IN AQUEOUS		
SOLUTION))		

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: 3 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:	35-9443-9	Version Number:	1.00
Issue Date:	03/30/22	Supercedes Date:	Initial Issue

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Safety Data Sheet

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Document Group:	32-5808-4	Version Number:	2.00
Issue Date:	10/27/23	Supercedes Date:	04/05/22

SECTION 1: Identification

1.1. Product identifier 3MTM Scotch-WeldTM 7240 B/A FR- Part B

1.2. Recommended use and restrictions on use

Recommended use Structural adhesive

1.3. Supplier's details	
MANUFACTURER:	3M
DIVISION:	3M France
	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

Serious Eye Damage/Irritation: Category 2A. Skin Corrosion/Irritation: Category 2. Skin Sensitizer: Category 1A.

2.2. Label elements Signal word Warning

Symbols Exclamation mark |

Pictograms



Hazard Statements

Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction.

Precautionary Statements

Prevention:

Avoid breathing dust/fume/gas/mist/vapors/spray. Wear protective gloves and eye/face protection. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response:

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.

Disposal:

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

15% of the mixture consists of ingredients of unknown acute oral toxicity.

15% of the mixture consists of ingredients of unknown acute dermal toxicity. 88% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Alumina Trihydrate	21645-51-2	10 - 30 Trade Secret *
Bisphenol A Diglycidyl Ether	1675-54-3	10 - 30 Trade Secret *
EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE	9003-36-5	10 - 30 Trade Secret *
RESIN		
Oxide glass chemicals	65997-17-3	10 - 20 Trade Secret *
1,4-BIS[(2,3-	14228-73-0	< 10 Trade Secret *
EPOXYPROPOXY)METHYL]CYCLOHEXANE		
Acrylic copolymer (NJTS Reg. No. 04499600-7456)	Trade Secret*	< 10 Trade Secret *
Silica	7631-86-9	< 5 Trade Secret *
Red Phosphorus	7723-14-0	< 3 Trade Secret *
Siloxanes and Silicones, di-Me, reaction products with	67762-90-7	< 3 Trade Secret *
silica		
3-(trimethoxysilyl)propyl glycidyl ether	2530-83-8	< 2 Trade Secret *
Carbon Black	1333-86-4	< 1 Trade Secret *
Sodium Oxide	1313-59-3	< 0.5 Trade Secret *
Stannous Sulfate	7488-55-3	< 0.5 Trade Secret *

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:

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

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

<u>Substance</u>	<u>Condition</u>
Aldehydes	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Chloride	During Combustion

5.3. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Use wet sweeping compound or water to avoid dusting. Sweep up.

spaces, provide mec

Place in a closed container approved for transportation by appropriate authorities. Clean up residue. 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 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.

7.2. Conditions for safe storage including any incompatibilities

Keep container tightly closed. Store in a well-ventilated place. Store away from heat. Store away from acids. Store away from strong bases.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

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

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Carbon Black	1333-86-4	ACGIH	TWA(inhalable fraction):3 mg/m3	A3: Confirmed animal carcin.
Carbon Black	1333-86-4	OSHA	TWA:3.5 mg/m3	
Aluminum, insoluble compounds	21645-51-2	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin
DUST, INERT OR NUISANCE	21645-51-2	OSHA	TWA(as total dust):15 mg/m3;TWA(as total dust):50 millions of particles/cu. ft.(15 mg/m3);TWA(respirable fraction):5 mg/m3;TWA(respirable fraction):15 millions of particles/cu. ft.(5 mg/m3)	
Oxide glass chemicals	65997-17-3	Manufacturer determined	TWA(as non-fibrous, respirable)(8 hours):3 mg/m3;TWA(as non-fibrous, inhalable fraction)(8 hours):10 mg/m3	
SILICA, AMORPHOUS	67762-90-7	OSHA	TWA:20 millions of particles/cu. ft.;TWA concentration:0.8 mg/m3	
TIN, INORGANIC COMPOUNDS, EXCEPT OXIDES	7488-55-3	OSHA	TWA(as Sn):2 mg/m3	
DUST, INERT OR NUISANCE	7631-86-9	OSHA	TWA(as total dust):15 mg/m3;TWA(as total dust):50 millions of particles/cu. ft.(15 mg/m3);TWA(respirable fraction):5 mg/m3;TWA(respirable	

			fraction):15 millions of particles/cu. ft.(5 mg/m3)	
Red Phosphorus	7723-14-0	OSHA	TWA:0.1 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

Curing enclosures must be exhausted to outdoors or to a suitable emission control device. 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. Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining. Use with appropriate local exhaust ventilation.

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. 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

Appearance	
Physical state	Solid
Color	Black

OdorMild EpoxyOdor thresholdNo Data AvailablepHNo Data AvailableMelting pointNo Data AvailableBoiling PointNo Data AvailableBoiling PointNo Data AvailableFlash Point>=100 °C [Test Method:Closed Cup]Evaporation rateNot ApplicableFlammability (solid, gas)Not ClassifiedFlammabile Limits(LEL)Not ApplicableFlammable Limits(UEL)Not ApplicableVapor PressureNot ApplicableVapor Density1.04 - 1.1 g/cm3Specific Gravity1.04 - 1.1 [Ref Std:WATER=1]Solubility in WaterNo Data AvailablePartition coefficient: n-octanol/waterNo Data AvailableAutoignition temperatureNo Data AvailableViscosity70 - 200 Pa-s [@ 23 °C] [Test Method:Brookfield]Hazardous Air PollutantsNo Data AvailableMolecular weightNo Data AvailableVoC Less H2O & Exempt SolventsNot Applicable	Specific Physical Form:	Thixotropic paste
pHNo Data AvailableMelting pointNo Data AvailableBoiling PointNot ApplicableFlash Point>=100 °C [Test Method:Closed Cup]Evaporation rateNot ApplicableFlammability (solid, gas)Not ClassifiedFlammabile Limits(LEL)Not ApplicableFlammable Limits(UEL)Not ApplicableVapor PressureNot ApplicableVapor Density1.04 - 1.1 g/cm3Specific Gravity1.04 - 1.1 [Ref Std:WATER=1]Solubility in WaterNo Data AvailableSolubility - non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableViscosity70 - 200 Pa-s [@ 23 °C] [Test Method:Brookfield]Hazardous Air PollutantsNo Data AvailableMolecular weightNo Data AvailableVolatile Organic CompoundsNot ApplicablePercent volatile1 % weight	Odor	Mild Epoxy
Melting pointNo Data AvailableBoiling PointNot ApplicableFlash Point>=100 °C [Test Method:Closed Cup]Evaporation rateNot ApplicableFlammability (solid, gas)Not ClassifiedFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not ApplicableVapor PressureNot ApplicableVapor DensityNot ApplicableDensity1.04 - 1.1 g/cm3Specific Gravity1.04 - 1.1 [Ref Std:WATER=1]Solubility in WaterNo Data AvailableSolubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableViscosity70 - 200 Pa-s [@ 23 °C] [Test Method: Brookfield]Hazardous Air PollutantsNo Data AvailableMolecular weightNo Data AvailableVolatile Organic CompoundsNot ApplicablePercent volatile1 % weight	Odor threshold	No Data Available
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Specific Gravity1.04 - 1.1 [Ref Std:WATER=1]Solubility in WaterNo Data AvailableSolubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNot ApplicableDecomposition temperatureNo Data AvailableViscosity70 - 200 Pa-s [@ 23 °C] [Test Method:Brookfield]Hazardous Air PollutantsNo Data AvailableMolecular weightNo Data AvailableVolatile Organic CompoundsNot ApplicablePercent volatile1 % weight	Vapor Density	Not Applicable
Solubility in WaterNo Data AvailableSolubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNot ApplicableDecomposition temperatureNo Data AvailableViscosity70 - 200 Pa-s [@ 23 °C] [Test Method: Brookfield]Hazardous Air PollutantsNo Data AvailableMolecular weightNo Data AvailableVolatile Organic CompoundsNot ApplicablePercent volatile1 % weight	Density	1.04 - 1.1 g/cm3
Solubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNot ApplicableDecomposition temperatureNo Data AvailableViscosity70 - 200 Pa-s [@ 23 °C] [Test Method:Brookfield]Hazardous Air PollutantsNo Data AvailableMolecular weightNo Data AvailableVolatile Organic CompoundsNot ApplicablePercent volatile1 % weight	Specific Gravity	1.04 - 1.1 [<i>Ref Std:</i> WATER=1]
Partition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNot ApplicableDecomposition temperatureNo Data AvailableViscosity70 - 200 Pa-s [@ 23 °C] [Test Method:Brookfield]Hazardous Air PollutantsNo Data AvailableMolecular weightNo Data AvailableVolatile Organic CompoundsNot ApplicablePercent volatile1 % weight	Solubility in Water	No Data Available
Autoignition temperatureNot ApplicableDecomposition temperatureNo Data AvailableViscosity70 - 200 Pa-s [@ 23 °C] [Test Method:Brookfield]Hazardous Air PollutantsNo Data AvailableMolecular weightNo Data AvailableVolatile Organic CompoundsNot ApplicablePercent volatile1 % weight	Solubility- non-water	No Data Available
Decomposition temperatureNo Data AvailableViscosity70 - 200 Pa-s [@ 23 °C] [Test Method:Brookfield]Hazardous Air PollutantsNo Data AvailableMolecular weightNo Data AvailableVolatile Organic CompoundsNot ApplicablePercent volatile1 % weight	Partition coefficient: n-octanol/ water	No Data Available
Decomposition temperatureNo Data AvailableViscosity70 - 200 Pa-s [@ 23 °C] [Test Method:Brookfield]Hazardous Air PollutantsNo Data AvailableMolecular weightNo Data AvailableVolatile Organic CompoundsNot ApplicablePercent volatile1 % weight	Autoignition temperature	Not Applicable
Hazardous Air PollutantsNo Data AvailableMolecular weightNo Data AvailableVolatile Organic CompoundsNot ApplicablePercent volatile1% weight	Decomposition temperature	No Data Available
Molecular weightNo Data AvailableVolatile Organic CompoundsNot ApplicablePercent volatile1 % weight		70 - 200 Pa-s [@ 23 °C] [Test Method:Brookfield]
Volatile Organic CompoundsNot ApplicablePercent volatile1 % weight	Hazardous Air Pollutants	No Data Available
Percent volatile 1 % weight	Molecular weight	No Data Available
e	Volatile Organic Compounds	Not Applicable
VOC Less H2O & Exempt SolventsNot Applicable	Percent volatile	1 % weight
	VOC Less H2O & Exempt Solvents	Not Applicable

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

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 acids Strong bases

10.6. Hazardous decomposition products

<u>Substance</u>

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:

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.

Carcinogenicity:

Ingredient	CAS No.	Class Description	Regulation
Carbon black	1333-86-4	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	Inhalation- Dust/Mist(4 hr)		No data available; calculated ATE >12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	Dermal	Rat	LD50 > 2,000 mg/kg
EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	Ingestion	Rat	LD50 > 5,000 mg/kg
Bisphenol A Diglycidyl Ether	Dermal	Rat	LD50 > 1,600 mg/kg
Bisphenol A Diglycidyl Ether	Ingestion	Rat	LD50 > 1,000 mg/kg
Alumina Trihydrate	Dermal		LD50 estimated to be $> 5,000 \text{ mg/kg}$
Alumina Trihydrate	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Alumina Trihydrate	Ingestion	Rat	LD50 > 5,000 mg/kg
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	Dermal	Rabbit	LD50 > 2,000 mg/kg
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 5.19 mg/l
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	Ingestion	Rat	LD50 1,098 mg/kg
Oxide glass chemicals	Dermal		LD50 estimated to be > 5,000 mg/kg

Oxide glass chemicals	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Red Phosphorus	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
Red Phosphorus	Ingestion	Rat	LD50 > 15,000 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
Siloxanes and Silicones, di-Me, reaction products with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Siloxanes and Silicones, di-Me, reaction products with silica	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Rat	LD50 > 5,110 mg/kg
3-(trimethoxysilyl)propyl glycidyl ether	Dermal	Rabbit	LD50 4,000 mg/kg
3-(trimethoxysilyl)propyl glycidyl ether	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 5.3 mg/l
3-(trimethoxysilyl)propyl glycidyl ether	Ingestion	Rat	LD50 7,010 mg/kg
Carbon Black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon Black	Ingestion	Rat	LD50 > 8,000 mg/kg
Sodium Oxide	Ingestion	Professio nal judgeme nt	LD50 estimated to be 50 - 300 mg/kg
Stannous Sulfate	Inhalation- Dust/Mist (4 hours)	Rat	LC50 2 mg/l
Stannous Sulfate	Ingestion	Rat	LD50 2,207 mg/kg
Stannous Sulfate	Dermal	similar health hazards	LD50 estimated to be 2,000 - 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	Rabbit	Irritant
Bisphenol A Diglycidyl Ether	Rabbit	Mild irritant
Alumina Trihydrate	Rabbit	No significant irritation
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	In vitro	Irritant
	data	
Oxide glass chemicals	Professio	No significant irritation
	nal	
	judgeme	
	nt	
Red Phosphorus	Rabbit	No significant irritation
Silica	Rabbit	No significant irritation
Siloxanes and Silicones, di-Me, reaction products with silica	Rabbit	No significant irritation
3-(trimethoxysilyl)propyl glycidyl ether	Rabbit	Mild irritant
Carbon Black	Rabbit	No significant irritation
Sodium Oxide	similar	Corrosive
	compoun	
	ds	
Stannous Sulfate	Professio	Irritant
	nal	
	judgeme	
	nt	

Serious Eye Damage/Irritation

Name	Species	Value

EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	Rabbit	No significant irritation
Bisphenol A Diglycidyl Ether	Rabbit	Moderate irritant
Alumina Trihydrate	Rabbit	No significant irritation
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	In vitro	No significant irritation
	data	-
Oxide glass chemicals	Professio	No significant irritation
	nal	
	judgeme	
	nt	
Red Phosphorus	Rabbit	No significant irritation
Silica	Rabbit	No significant irritation
Siloxanes and Silicones, di-Me, reaction products with silica	Rabbit	No significant irritation
3-(trimethoxysilyl)propyl glycidyl ether	Rabbit	Corrosive
Carbon Black	Rabbit	No significant irritation
Sodium Oxide	similar	Corrosive
	compoun	
	ds	
Stannous Sulfate	Professio	Corrosive
	nal	
	judgeme	
	nt	

Skin Sensitization

Name	Species	Value
EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	Multiple	Sensitizing
	animal	
	species	
Bisphenol A Diglycidyl Ether	Human	Sensitizing
	and	
	animal	
Alumina Trihydrate	Guinea	Not classified
	pig	
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	Mouse	Sensitizing
Red Phosphorus	Guinea	Not classified
	pig	
Silica	Human	Not classified
	and	
	animal	
Siloxanes and Silicones, di-Me, reaction products with silica	Human	Not classified
	and	
	animal	
3-(trimethoxysilyl)propyl glycidyl ether	Guinea	Not classified
	pig	
Stannous Sulfate	Human	Sensitizing

Respiratory Sensitization

Name	Species	Value
Bisphenol A Diglycidyl Ether	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	In vivo	Not mutagenic
EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	In Vitro	Some positive data exist, but the data are not sufficient for classification
Bisphenol A Diglycidyl Ether	In vivo	Not mutagenic
Bisphenol A Diglycidyl Ether	In Vitro	Some positive data exist, but the data are not sufficient for classification
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	In vivo	Not mutagenic
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	In Vitro	Some positive data exist, but the data are not sufficient for classification
Oxide glass chemicals	In Vitro	Some positive data exist, but the data are not sufficient for classification

Red Phosphorus	In Vitro	Not mutagenic
Silica	In Vitro	Not mutagenic
Siloxanes and Silicones, di-Me, reaction products with silica	In Vitro	Not mutagenic
3-(trimethoxysilyl)propyl glycidyl ether	In vivo	Not mutagenic
3-(trimethoxysilyl)propyl glycidyl ether	In Vitro	Some positive data exist, but the data are not sufficient for classification
Carbon Black	In Vitro	Not mutagenic
Carbon Black	In vivo	Some positive data exist, but the data are not sufficient for classification
Stannous Sulfate	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Bisphenol A Diglycidyl Ether	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Alumina Trihydrate	Not Specified	Multiple animal species	Not carcinogenic
Oxide glass chemicals	Inhalation	Multiple animal species	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
Siloxanes and Silicones, di-Me, reaction products with silica	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
3-(trimethoxysilyl)propyl glycidyl ether	Dermal	Mouse	Not carcinogenic
Carbon Black	Dermal	Mouse	Not carcinogenic
Carbon Black	Ingestion	Mouse	Not carcinogenic
Carbon Black	Inhalation	Rat	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Bisphenol A Diglycidyl Ether	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Bisphenol A Diglycidyl Ether	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Bisphenol A Diglycidyl Ether	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesi s
Bisphenol A Diglycidyl Ether	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation
Alumina Trihydrate	Ingestion	Not classified for development	Rat	NOAEL 768 mg/kg/day	during organogenesi s
1,4-BIS[(2,3- EPOXYPROPOXY)METHYL]CYCLOHE XANE	Ingestion	Not classified for female reproduction	Rat	NOAEL 300 mg/kg/day	premating into lactation
1,4-BIS[(2,3- EPOXYPROPOXY)METHYL]CYCLOHE XANE	Ingestion	Not classified for male reproduction	Rat	NOAEL 300 mg/kg/day	33 days
1,4-BIS[(2,3- EPOXYPROPOXY)METHYL]CYCLOHE XANE	Ingestion	Not classified for development	Rat	NOAEL 300 mg/kg/day	premating into lactation
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
Siloxanes and Silicones, di-Me, reaction	Ingestion	Not classified for female reproduction	Rat	NOAEL 509	1 generation

products with silica				mg/kg/day	
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesi s
3-(trimethoxysilyl)propyl glycidyl ether	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	1 generation
3-(trimethoxysilyl)propyl glycidyl ether	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	1 generation
3-(trimethoxysilyl)propyl glycidyl ether	Ingestion	Not classified for development	Rat	NOAEL 3,000 mg/kg/day	during organogenesi s

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
EPICHLOROHYDRIN- PHENOL- FORMALDEHYDE RESIN	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
1,4-BIS[(2,3- EPOXYPROPOXY)MET HYL]CYCLOHEXANE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Sodium Oxide	Inhalation	respiratory irritation	May cause respiratory irritation	Professio nal judgeme nt	NOAEL Not available	
Stannous Sulfate	Inhalation	respiratory irritation	May cause respiratory irritation	Professio nal judgeme nt	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
EPICHLOROHYDRIN- PHENOL- FORMALDEHYDE RESIN	Ingestion	heart endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system liver immune system nervous system eyes kidney and/or bladder respiratory system vascular system	Not classified	Rat	NOAEL 250 mg/kg/day	13 weeks
Bisphenol A Diglycidyl Ether	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
Bisphenol A Diglycidyl Ether	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Bisphenol A Diglycidyl Ether	Ingestion	auditory system heart endocrine system hematopoietic system liver eyes kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
1,4-BIS[(2,3- EPOXYPROPOXY)MET	Ingestion	endocrine system gastrointestinal tract	Not classified	Rat	NOAEL 300 mg/kg/day	33 days

HYL]CYCLOHEXANE		liver heart hematopoietic system immune system nervous system kidney and/or bladder				
Oxide glass chemicals	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
Silica	Inhalation	respiratory system silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Siloxanes and Silicones, di-Me, reaction products with silica	Inhalation	respiratory system silicosis	Not classified	Human	NOAEL Not available	occupational exposure
3-(trimethoxysilyl)propyl glycidyl ether	Ingestion	heart endocrine system bone, teeth, nails, and/or hair hematopoietic system liver immune system nervous system kidney and/or bladder respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Carbon Black	Inhalation	pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure
Stannous Sulfate	Ingestion	hematopoietic system liver heart kidney and/or bladder	Not classified	Rat	NOAEL 40 mg/kg/day	4 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. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

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:

Phy	sical Hazards

Not applicable

Health Hazards

Respiratory or Skin Sensitization
Serious eye damage or eye irritation
Skin Corrosion or Irritation

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.

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