



Safety Data Sheet

Copyright, 2021, 3M Canada Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

Document group:	10-8291-6	Version number:	14.09
Issue Date:	2021/10/01	Supersedes Date:	2021/06/04

This Safety Data Sheet has been prepared in accordance with the Canadian Hazardous Products Regulations.

SECTION 1: Identification

1.1. Product identifier

3M (TM) SCOTCH-WELD (TM) CORE SPLICE ADHESIVE FILM AF-3024

Product Identification Numbers

62-3024-3155-6	62-3024-3505-2	62-3024-3507-8	62-3025-0455-0	62-3025-0655-5
62-3025-0656-3	62-3025-0805-6	62-3025-0955-9	62-3025-1105-0	62-3025-1355-1
62-3025-1705-7	62-3025-3155-3	62-3025-3505-9	62-3025-3506-7	62-3025-3507-5
62-3025-3508-3	62-3025-3509-1	62-3025-4705-4	62-3067-3505-1	62-3067-4705-6
87-2500-0185-3	87-2500-0342-0	87-3300-0012-3	87-3300-0073-5	87-3300-0115-4
87-3300-0154-3	87-3300-0520-5	87-3300-0521-3	87-3300-0522-1	87-3300-0523-9
87-3300-0524-7	87-3300-0525-4	HB-0044-7308-6		

1.2. Recommended use and restrictions on use

Intended Use

Core splice film

Specific Use

Adhesive Film; Filling mismatch areas and reinforcing honeycomb core

Restrictions on use

Not applicable

1.3. Supplier's details

Company:	3M Canada Company
Division:	Automotive and Aerospace Solutions Division
Address:	1840 Oxford Street East, Post Office Box 5757, London, Ontario N6A 4T1
Telephone:	(800) 364-3577
Website:	www.3M.ca

1.4. Emergency telephone number

Medical Emergency Telephone: 1-800-3M HELPS / 1-800-364-3577; Transportation Emergency Telephone (CANUTEC): (613) 996-6666

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Self-Reactive: Type F.

Respiratory Sensitizer: Category 1.

2.2. Label elements**Signal word**

Danger

Symbols

Flame | Health Hazard |

Pictograms**Hazard statements**

Heating may cause a fire.

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

Precautionary statements**Prevention:**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Keep only in original packaging. Keep cool. Avoid breathing dust/fume/gas/mist/vapours/spray. In case of inadequate ventilation wear respiratory protection. Wear protective gloves and eye/face protection.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician. In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:

Store in a well-ventilated place. Store at temperatures not exceeding 5C/40F. Store separately.

Disposal:

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

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt	Common Name
Epoxy Resin 1	28064-14-4	40 - 70	Phenol, polymer with formaldehyde, glycidyl ether
Synthetic Elastomer	Trade Secret	7 - 13	Not Applicable
Epoxy Resin 2	25036-25-3	5 - 10	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]

Glass Bubbles	65997-17-3	5 - 10	Glass, oxide, chemicals
Amorphous Silica	112945-52-5	1 - 5	Fumed amorphous silica, crystalline-free
Clay	68953-58-2	1 - 5	Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite
Dicyandiamide	461-58-5	1 - 5	Guanidine, cyano-
Epoxy Resin 3	25068-38-6	1 - 5	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane
3-(p-Chlorophenyl)-1,1-Dimethylurea	150-68-5	< 2.5	Urea, N'-(4-chlorophenyl)-N,N-dimethyl-
Azobiscarboxamide	123-77-3	0.1 - 1 Trade Secret *	Diazenedicarboxamide
Acetone	67-64-1	< 0.99	2-Propanone
DCM	75-09-2	< 0.01	Methane, dichloro-

Synthetic Elastomer is a non-hazardous Trade Secret material according to WHMIS criteria.

*The actual concentration of this ingredient has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

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

Skin Contact:

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye Contact:

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 respiratory reaction (difficulty breathing, wheezing, cough, and tightness of chest).

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 flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Aldehydes
Chlorine
Carbon monoxide
Carbon dioxide

Condition

During Combustion
During Combustion
During Combustion
During Combustion

Hydrogen Chloride
Hydrogen Cyanide
Ammonia
Oxides of Nitrogen

During Combustion
During Combustion
During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. Warning! A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. 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 using non-sparking tools. 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

Avoid breathing of vapours created during cure cycle. Avoid breathing of dust created by cutting, sanding, grinding or machining. For industrial or professional use only. Not for consumer sale or use. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Protect from sunlight. Store away from heat. Store at temperatures not exceeding 5C/40F. Keep only in original container. Store away from other materials. Store away from areas where product may come into contact with food or pharmaceuticals. Keep/store away from clothing and other combustible materials. 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
3-(p-Chlorophenyl)-1,1-Dimethylurea	150-68-5	Manufacturer determined	TWA(Inhalable aerosol)(8 hours):1 mg/m3	
Glass Bubbles	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	
Acetone	67-64-1	ACGIH	TWA:250 ppm;STEL:500 ppm	
DCM	75-09-2	ACGIH	TWA:50 ppm	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Provide ventilated enclosure for curing. 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/vapours/spray. If ventilation is not adequate, use respiratory protection equipment. Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining.

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

No protective gloves required.

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours 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	Solid
Specific Physical Form:	Film
Colour	Off-White
Odour	Odourless
Odour threshold	<i>No Data Available</i>
pH	<i>Not Applicable</i>
Melting point/Freezing point	<i>No Data Available</i>
Boiling point	<i>Not Applicable</i>
Flash Point	No flash point
Evaporation rate	<i>Not Applicable</i>
Flammability (solid, gas)	Self-Reactive: Type F.
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Vapour Pressure	<i>Not Applicable</i>
Vapour Density and/or Relative Vapour Density	<i>Not Applicable</i>
Density	<i>Not Applicable</i>
Relative density	<i>Not Applicable</i>

Water solubility	Nil
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	Not Applicable
Decomposition temperature	No Data Available
Viscosity/Kinematic Viscosity	Not Applicable
Volatile Organic Compounds	
Percent volatile	0 %
VOC Less H2O & Exempt Solvents	
Molecular weight	No Data Available

Nanoparticles

This material contains nanoparticles.

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

Amines

10.6. Hazardous decomposition productsSubstanceCondition

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.

Skin Contact:

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

Eye Contact:

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

Ingestion:

Physical Blockage: Signs/symptoms may include cramping, abdominal pain, and constipation.

Carcinogenicity:

Ingredient	CAS No.	Class Description	Regulation
Dichloromethane (methylene chloride)	75-09-2	Grp. 2A: Probable human carc.	International Agency for Research on Cancer
Dichloromethane (Methylene Chloride)	75-09-2	Anticipated human carcinogen	National Toxicology Program Carcinogens
METHYLENE CHLORIDE	75-09-2	Cancer hazard	OSHA Carcinogens

Toxicological Data

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Epoxy Resin 1	Dermal	Rabbit	LD50 > 6,000 mg/kg
Epoxy Resin 1	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.7 mg/l
Epoxy Resin 1	Ingestion	Rat	LD50 > 4,000 mg/kg
Synthetic Elastomer	Dermal	Rabbit	LD50 > 15,000 mg/kg
Synthetic Elastomer	Ingestion	Rat	LD50 > 30,000 mg/kg
Glass Bubbles	Dermal		LD50 estimated to be > 5,000 mg/kg
Glass Bubbles	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Epoxy Resin 2	Dermal	Rat	LD50 > 1,600 mg/kg
Epoxy Resin 2	Ingestion	Rat	LD50 > 1,000 mg/kg
Epoxy Resin 3	Dermal	Rat	LD50 > 1,600 mg/kg
Epoxy Resin 3	Ingestion	Rat	LD50 > 1,000 mg/kg
Dicyandiamide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Dicyandiamide	Ingestion	Rat	LD50 > 30,000 mg/kg
Amorphous Silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Amorphous Silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Amorphous Silica	Ingestion	Rat	LD50 > 5,110 mg/kg
Clay	Dermal		LD50 estimated to be > 5,000 mg/kg
Clay	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 12.6 mg/l
Clay	Ingestion	Rat	LD50 > 5,000 mg/kg
3-(p-Chlorophenyl)-1,1-Dimethylurea	Dermal	Rabbit	LD50 > 2,500 mg/kg
3-(p-Chlorophenyl)-1,1-Dimethylurea	Ingestion	Rat	LD50 1,480 mg/kg
Azobiscarboxamide	Dermal	Rat	LD50 > 2,000 mg/kg
Azobiscarboxamide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.1 mg/l
Azobiscarboxamide	Ingestion	Rat	LD50 > 5,000 mg/kg
Acetone	Dermal	Rabbit	LD50 > 15,688 mg/kg
Acetone	Inhalation-Vapor (4	Rat	LC50 76 mg/l

	hours)		
Acetone	Ingestion	Rat	LD50 5,800 mg/kg
DCM	Dermal	Rat	LD50 > 2,000 mg/kg
DCM	Inhalation-Vapor (4 hours)	Rat	LC50 63.7 mg/l
DCM	Ingestion	Rat	LD50 1,410 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Overall product	Multiple animal species	No significant irritation
Epoxy Resin 1	Rabbit	Minimal irritation
Synthetic Elastomer	Professional judgement	No significant irritation
Glass Bubbles	Professional judgement	No significant irritation
Epoxy Resin 2	Rabbit	Mild irritant
Epoxy Resin 3	Rabbit	Mild irritant
Dicyandiamide	Human and animal	Minimal irritation
Amorphous Silica	Rabbit	No significant irritation
Clay	Rat	No significant irritation
3-(p-Chlorophenyl)-1,1-Dimethylurea	similar compounds	Mild irritant
Azobiscarboxamide	Rabbit	No significant irritation
Acetone	Mouse	Minimal irritation
DCM	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Epoxy Resin 1	Rabbit	Mild irritant
Synthetic Elastomer	Professional judgement	No significant irritation
Glass Bubbles	Professional judgement	No significant irritation
Epoxy Resin 2	Rabbit	Moderate irritant
Epoxy Resin 3	Rabbit	Moderate irritant
Dicyandiamide	Professional judgement	Mild irritant
Amorphous Silica	Rabbit	No significant irritation
Clay	Rabbit	No significant irritation
3-(p-Chlorophenyl)-1,1-Dimethylurea	similar compounds	Moderate irritant
Azobiscarboxamide	Rabbit	No significant irritation
Acetone	Rabbit	Severe irritant
DCM	Rabbit	Severe irritant

Skin Sensitization

Name	Species	Value
Overall product	Guinea pig	Not classified
Epoxy Resin 1	Human and animal	Sensitizing
Epoxy Resin 2	Human and animal	Sensitizing
Epoxy Resin 3	Human and animal	Sensitizing
Dicyandiamide	Guinea pig	Not classified
Amorphous Silica	Human and animal	Not classified
Azobiscarboxamide	Human	Not classified

Respiratory Sensitization

Name	Species	Value
Epoxy Resin 2	Human	Not classified
Epoxy Resin 3	Human	Not classified
Azobiscarboxamide	Human	Sensitizing

Germ Cell Mutagenicity

Name	Route	Value
Epoxy Resin 1	In Vitro	Some positive data exist, but the data are not sufficient for classification
Glass Bubbles	In Vitro	Some positive data exist, but the data are not sufficient for classification
Epoxy Resin 2	In vivo	Not mutagenic
Epoxy Resin 2	In Vitro	Some positive data exist, but the data are not sufficient for classification
Epoxy Resin 3	In vivo	Not mutagenic
Epoxy Resin 3	In Vitro	Some positive data exist, but the data are not sufficient for classification
Dicyandiamide	In Vitro	Not mutagenic
Amorphous Silica	In Vitro	Not mutagenic
3-(p-Chlorophenyl)-1,1-Dimethylurea	In Vitro	Some positive data exist, but the data are not sufficient for classification
3-(p-Chlorophenyl)-1,1-Dimethylurea	In vivo	Some positive data exist, but the data are not sufficient for classification
Azobiscarboxamide	In vivo	Not mutagenic
Azobiscarboxamide	In Vitro	Some positive data exist, but the data are not sufficient for classification
Acetone	In vivo	Not mutagenic
Acetone	In Vitro	Some positive data exist, but the data are not sufficient for classification
DCM	In vivo	Not mutagenic
DCM	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Glass Bubbles	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Epoxy Resin 2	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Epoxy Resin 3	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification

Dicyandiamide	Ingestion	Rat	Not carcinogenic
Amorphous Silica	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
3-(p-Chlorophenyl)-1,1-Dimethylurea	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Acetone	Not Specified	Multiple animal species	Not carcinogenic
DCM	Inhalation	Multiple animal species	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Epoxy Resin 2	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Epoxy Resin 2	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Epoxy Resin 2	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
Epoxy Resin 2	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation
Epoxy Resin 3	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Epoxy Resin 3	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Epoxy Resin 3	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
Epoxy Resin 3	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation
Dicyandiamide	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
Dicyandiamide	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	44 days
Dicyandiamide	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
Amorphous Silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Amorphous Silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Amorphous Silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
3-(p-Chlorophenyl)-1,1-Dimethylurea	Ingestion	Not classified for development	Mouse	LOAEL 215 mg/kg/day	during gestation
Azobiscarboxamide	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	1 generation
Azobiscarboxamide	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	1 generation
Azobiscarboxamide	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	1 generation
Acetone	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,700 mg/kg/day	13 weeks
Acetone	Inhalation	Not classified for development	Rat	NOAEL 5.2 mg/l	during organogenesis
DCM	Inhalation	Not classified for female reproduction	Rat	NOAEL 5.2 mg/l	2 generation
DCM	Inhalation	Not classified for male reproduction	Rat	NOAEL 5.2	2 generation

				mg/l	
DCM	Inhalation	Not classified for development	Multiple animal species	NOAEL 4.3 mg/l	during gestation

Target Organ(s)**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
3-(p-Chlorophenyl)-1,1-Dimethylurea	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar compounds	NOAEL Not available	
3-(p-Chlorophenyl)-1,1-Dimethylurea	Ingestion	methemoglobinemia	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	not applicable
Acetone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Acetone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 hours
Acetone	Inhalation	liver	Not classified	Guinea pig	NOAEL Not available	
Acetone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
DCM	Dermal	blood	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	4 hours
DCM	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	occupational exposure
DCM	Inhalation	blood	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
DCM	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Glass Bubbles	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
Epoxy Resin 2	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
Epoxy Resin 2	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Epoxy Resin 2	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
Epoxy Resin 3	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
Epoxy Resin 3	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Epoxy Resin 3	Ingestion	auditory system heart endocrine system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days

		hematopoietic system liver eyes kidney and/or bladder				
Dicyandiamide	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 6,822 mg/kg/day	13 weeks
Amorphous Silica	Inhalation	respiratory system silicosis	Not classified	Human	NOAEL Not available	occupational exposure
3-(p-Chlorophenyl)-1,1-Dimethylurea	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	LOAEL 800 mg/kg/day	103 weeks
3-(p-Chlorophenyl)-1,1-Dimethylurea	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 65 mg/kg/day	103 weeks
3-(p-Chlorophenyl)-1,1-Dimethylurea	Ingestion	immune system	Not classified	Rat	LOAEL 520 mg/kg/day	13 weeks
Azobiscarboxamide	Inhalation	respiratory system heart endocrine system gastrointestinal tract bone, teeth, nails, and/or hair blood liver immune system nervous system kidney and/or bladder	Not classified	Rat	NOAEL 0.2 mg/l	90 days
Azobiscarboxamide	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 500 mg/kg/day	90 days
Acetone	Dermal	eyes	Not classified	Guinea pig	NOAEL Not available	3 weeks
Acetone	Inhalation	hematopoietic system	Not classified	Human	NOAEL 3 mg/l	6 weeks
Acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 days
Acetone	Inhalation	kidney and/or bladder	Not classified	Guinea pig	NOAEL 119 mg/l	not available
Acetone	Inhalation	heart liver	Not classified	Rat	NOAEL 45 mg/l	8 weeks
Acetone	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 900 mg/kg/day	13 weeks
Acetone	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 200 mg/kg/day	13 weeks
Acetone	Ingestion	liver	Not classified	Mouse	NOAEL 3,896 mg/kg/day	14 days
Acetone	Ingestion	eyes	Not classified	Rat	NOAEL 3,400 mg/kg/day	13 weeks
Acetone	Ingestion	respiratory system	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	muscles	Not classified	Rat	NOAEL 2,500 mg/kg	13 weeks
Acetone	Ingestion	skin bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 11,298 mg/kg/day	13 weeks
DCM	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 6.95 mg/l	2 years
DCM	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.17 mg/l	2 years
DCM	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for	Multiple animal	LOAEL 35 mg/l	8 weeks

			classification	species		
DCM	Inhalation	heart	Not classified	Human	NOAEL Not available	
DCM	Inhalation	immune system	Not classified	Rat	NOAEL 18 mg/l	28 days
DCM	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1,200 mg/kg/day	3 months
DCM	Ingestion	blood	Not classified	Rat	NOAEL 249 mg/kg/day	2 years
DCM	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 1,469 mg/kg/day	3 months
DCM	Ingestion	eyes	Not classified	Rat	NOAEL 249 mg/kg/day	104 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

No data available.

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. Safety, health and environmental regulations/legislation specific for the substance or mixture****Global inventory status**

Contact 3M for more information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. 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.

SECTION 16: Other information

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.

Health: 2 **Flammability:** 1 **Instability:** 1 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Document group:	10-8291-6	Version number:	14.09
Issue Date:	2021/10/01	Supersedes Date:	2021/06/04

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. The manufacturer MAKES NO WARRANTIES, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF PERFORMANCE, COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. User is responsible for determining whether the 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 product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M Canada SDSs are available at www.3M.ca