



Safety Data Sheet

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Document Group: 08-9716-5
Issue Date: 06/23/21

Version Number: 17.00
Supersedes Date: 04/30/21

SECTION 1: Identification

1.1. Product identifier

3M™ Scotchcast™ Electrical Resin 5230N

Product Identification Numbers

41-4800-0146-4, 41-4800-0147-2, 80-6116-1175-9, 80-6300-0017-4
7000006254, 7010401012

1.2. Recommended use and restrictions on use

Recommended use

Coating, Powder Coating for Electrical Insulation

1.3. Supplier's details

MANUFACTURER: 3M
DIVISION: Electrical Markets 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

Combustible Dust.

Skin Sensitizer: Category 1.

Carcinogenicity: Category 2.

2.2. Label elements

Signal word

Warning

Symbols

Exclamation mark | Health Hazard |

Pictograms



Hazard Statements

May form combustible dust concentrations in air.

May cause an allergic skin reaction.

Suspected of causing cancer.

Precautionary Statements

Prevention:

Obtain special instructions before use.

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

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wear protective gloves.

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

Response:

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

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

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

Storage:

Store locked up.

Disposal:

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

50% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	25036-25-3	40 - 60 Trade Secret *
Titanium Dioxide	13463-67-7	30 - 40 Trade Secret *
Benzophenonetetracarboxylic Anhydride	2421-28-5	5 - 10 Trade Secret *
Aluminum Oxide	1344-28-1	1 - 5 Trade Secret *
C.I. Pigment Blue 15	147-14-8	0.1 - 1 Trade Secret *
Synthetic Amorphous Silica, Fumed, Crystalline-Free	112945-52-5	0.1 - 1 Trade Secret *
N,N-Diethylaniline	91-66-7	< 0.5 Trade Secret *
Copper	7440-50-8	< 0.1 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 wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact:

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

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

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

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

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

Not applicable

SECTION 5: Fire-fighting measures**5.1. Suitable extinguishing media**

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

Powdered material may form explosive dust-air mixture. Avoid fire fighting methods that would cause powders to become airborne.

Hazardous Decomposition or By-Products**Substance**

Aldehydes
Carbon monoxide
Carbon dioxide
Hydrogen Chloride

Condition

During Combustion
During Combustion
During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Eliminate all ignition sources if safe to do so. 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

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Vacuum to avoid dusting. **WARNING!** A motor could be an ignition source and cause combustible dust in the spill area to burn or explode. 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. Do not handle until all safety precautions have been read and understood. 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. Use personal protective equipment (gloves, respirators, etc.) as required. Dust clouds of this material in sufficient concentration in combination with an ignition source may be explosive. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions. Routine housekeeping should be instituted to ensure that combustible dusts do not accumulate on surfaces. Solids can generate static electricity charges when transferred and in mixing operations sufficient to be an ignition source. Evaluate the need for precautions, such as grounding and bonding, low energy transfer of material (e.g. low speed, short distance), or inert atmospheres.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

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
SILICA, AMORPHOUS	112945-52-5	OSHA	TWA:20 millions of particles/cu. ft.;TWA concentration:0.8 mg/m ³	
Aluminum Oxide	1344-28-1	OSHA	TWA(as total dust):15 mg/m ³ ;TWA(respirable fraction):5 mg/m ³	
Aluminum, insoluble compounds	1344-28-1	ACGIH	TWA(respirable fraction):1 mg/m ³	A4: Not class. as human carcin
Titanium Dioxide	13463-67-7	ACGIH	TWA:10 mg/m ³	A4: Not class. as human carcin
Titanium Dioxide	13463-67-7	OSHA	TWA(as total dust):15 mg/m ³	
COPPER COMPOUNDS	147-14-8	ACGIH	TWA(as Cu, fume):0.2 mg/m ³ ;TWA(as Cu dust or mist):1 mg/m ³	
Copper	7440-50-8	OSHA	TWA(as Cu, fume):0.1 mg/m ³ ;TWA(as Cu dust or mist):1 mg/m ³	
COPPER, DUSTS AND MISTS, AS CU	7440-50-8	ACGIH	TWA(as Cu dust or mist):1 mg/m ³	
COPPER, FUME AS CU	7440-50-8	ACGIH	TWA(as Cu, fume):0.2 mg/m ³	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

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/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Provide local exhaust at process emission sources to control exposure near the source and to prevent the escape of dust into the work area. It is recommended that all dust control equipment (such as local exhaust ventilation), process equipment, and material transport systems involved in handling of this product be evaluated for the need for explosion-protection safeguards. Recognized safeguards include explosion relief vents, explosion suppression systems, and oxygen deficient process environments. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Evaluate the need for electrically classified equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

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

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 – Nitrile

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

Blue

Specific Physical Form:

Powder

Odor

Epoxy

Odor threshold

No Data Available

pH

Not Applicable

Melting point

No Data Available

Boiling Point

Not Applicable

Flash Point	No flash point
Evaporation rate	<i>Not Applicable</i>
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>
Vapor Pressure	<i>Not Applicable</i>
Vapor Density	<i>Not Applicable</i>
Density	<i>No Data Available</i>
Specific Gravity	1.6 [Ref Std: WATER=1]
Solubility in Water	Nil
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	<i>Not Applicable</i>
Molecular weight	≥1200 g/mole
Volatile Organic Compounds	0 %
Percent volatile	0 %
VOC Less H₂O & Exempt Solvents	0 %
*Dust deflagration index (Kst)	70 - 250 bar.m/s [Details:Typical Range]
Flash Point as text	No flash point
*Min. explosible conc.(MEC)	35 - 55 g/m ³ [Details:Typical Range]
*Min. ignition energy (MIE)	3 - 100 mJ [Details:Typical Range]
*Min. ign temp(MIT)-dust cloud	450 - 550 °C [Details:Typical Range]

* The values noted with an asterisk (*) in the above table are representative values based on testing of raw materials and selected products. Additionally, a material's characteristics may change depending upon the process and conditions of use at a facility, including further changes in particle size, or mixture with other materials. In order to obtain specific data for the material, we recommend the user conduct characterization testing based on the use factors at the specific facility.

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Sparks and/or flames

10.5. Incompatible materials

Combustibles

10.6. Hazardous decomposition products

Substance

None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

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

Allergic Respiratory Reaction in sensitive people: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

May cause additional health effects (see below).

Skin Contact:

Mechanical Skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

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

Eye Contact:

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

Ingestion:

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

Additional Health Effects:

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
Titanium Dioxide	13463-67-7	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
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Dermal	Rat	LD50 > 1,600 mg/kg
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Ingestion	Rat	LD50 > 1,000 mg/kg
Titanium Dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium Dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l

Titanium Dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
Benzophenonetetracarboxylic Anhydride	Inhalation-Dust/Mist (4 hours)	Guinea pig	LC50 > 1.8 mg/l
Benzophenonetetracarboxylic Anhydride	Dermal	Rabbit	LD50 > 3,160 mg/kg
Benzophenonetetracarboxylic Anhydride	Ingestion	Rat	LD50 12,800 mg/kg
Aluminum Oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminum Oxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminum Oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
C.I. Pigment Blue 15	Dermal		LD50 estimated to be > 5,000 mg/kg
C.I. Pigment Blue 15	Ingestion	Rat	LD50 10,000 mg/kg
Synthetic Amorphous Silica, Fumed, Crystalline-Free	Dermal	Rabbit	LD50 > 5,000 mg/kg
Synthetic Amorphous Silica, Fumed, Crystalline-Free	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Synthetic Amorphous Silica, Fumed, Crystalline-Free	Ingestion	Rat	LD50 > 5,110 mg/kg
N,N-Diethylaniline	Dermal	Rabbit	LD50 > 468 mg/kg
N,N-Diethylaniline	Inhalation-Vapor (4 hours)	Rat	LC50 1.9 mg/l
N,N-Diethylaniline	Ingestion	Rat	LD50 606 mg/kg
Copper	Dermal	Rat	LD50 > 2,000 mg/kg
Copper	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.11 mg/l
Copper	Ingestion	Rat	LD50 > 2,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Rabbit	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation
Benzophenonetetracarboxylic Anhydride	Rabbit	No significant irritation
Aluminum Oxide	Rabbit	No significant irritation
C.I. Pigment Blue 15	Rabbit	No significant irritation
Synthetic Amorphous Silica, Fumed, Crystalline-Free	Rabbit	No significant irritation
N,N-Diethylaniline	Rabbit	Mild irritant
Copper	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Rabbit	Mild irritant
Titanium Dioxide	Rabbit	No significant irritation
Benzophenonetetracarboxylic Anhydride	official classification	Severe irritant
Aluminum Oxide	Rabbit	No significant irritation
C.I. Pigment Blue 15	Rabbit	No significant irritation
Synthetic Amorphous Silica, Fumed, Crystalline-Free	Rabbit	No significant irritation
N,N-Diethylaniline	Rabbit	Mild irritant
Copper	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Guinea pig	Not classified
Titanium Dioxide	Human and animal	Not classified

Benzophenonetetracarboxylic Anhydride	Guinea pig	Sensitizing
C.I. Pigment Blue 15	Human	Not classified
Synthetic Amorphous Silica, Fumed, Crystalline-Free	Human and animal	Not classified
N,N-Diethylaniline	Guinea pig	Not classified

Respiratory Sensitization

Name	Species	Value
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Human	Not classified
Benzophenonetetracarboxylic Anhydride	Human	Some positive data exist, but the data are not sufficient for classification

Germ Cell Mutagenicity

Name	Route	Value
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	In vivo	Not mutagenic
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	In Vitro	Some positive data exist, but the data are not sufficient for classification
Titanium Dioxide	In Vitro	Not mutagenic
Titanium Dioxide	In vivo	Not mutagenic
Aluminum Oxide	In Vitro	Not mutagenic
C.I. Pigment Blue 15	In Vitro	Not mutagenic
Synthetic Amorphous Silica, Fumed, Crystalline-Free	In Vitro	Not mutagenic
N,N-Diethylaniline	In vivo	Not mutagenic
N,N-Diethylaniline	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Titanium Dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium Dioxide	Inhalation	Rat	Carcinogenic
Aluminum Oxide	Inhalation	Rat	Not carcinogenic
C.I. Pigment Blue 15	Ingestion	Mouse	Not carcinogenic
Synthetic Amorphous Silica, Fumed, Crystalline-Free	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation
C.I. Pigment Blue 15	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
C.I. Pigment Blue 15	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	42 days
C.I. Pigment Blue 15	Ingestion	Not classified for development	Rat	NOAEL 1,000	premating

				mg/kg/day	into lactation
Synthetic Amorphous Silica, Fumed, Crystalline-Free	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Synthetic Amorphous Silica, Fumed, Crystalline-Free	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Synthetic Amorphous Silica, Fumed, Crystalline-Free	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
N,N-Diethylaniline	Ingestion	Not classified for development	Rat	NOAEL 250 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Benzophenonetetracarboxylic Anhydride	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure
N,N-Diethylaniline	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	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
Titanium Dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years
Titanium Dioxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Aluminum Oxide	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Aluminum Oxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
C.I. Pigment Blue 15	Ingestion	endocrine system hematopoietic system respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
C.I. Pigment Blue 15	Ingestion	kidney and/or bladder	Not classified	Multiple animal species	NOAEL Not available	not available
Synthetic Amorphous Silica, Fumed, Crystalline-Free	Inhalation	respiratory system silicosis	Not classified	Human	NOAEL Not available	occupational exposure
N,N-Diethylaniline	Ingestion	hematopoietic system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 10 mg/kg/day	28 days
N,N-Diethylaniline	Ingestion	liver kidney and/or bladder	Not classified	Rat	NOAEL 250 mg/kg/day	28 days

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.

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

Combustible Dust

Health Hazards

Carcinogenicity

Respiratory or Skin Sensitization

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

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
Aluminum Oxide	1344-28-1	Trade Secret 1 - 5

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

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.

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.

HMIS Hazard Classification

Health: *2 **Flammability:** 1 **Physical Hazard:** 0 **Personal Protection:** X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

Document Group: 08-9716-5

Version Number: 17.00

Issue Date: 06/23/21

Supersedes Date: 04/30/21

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