



Safety Data Sheet

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Document Group:	28-6400-7	Version Number:	2.03
Issue Date:	05/21/15	Supersedes Date:	08/22/14

Product identifier

3M™ Roloc™ Bristle Disc Kit, 982RS

Recommended use

Abrasive Product

Supplier's details

MANUFACTURER:	3M
DIVISION:	Abrasive Systems 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:

24-8593-6, 24-3532-9, 24-0677-5, 24-2516-3, 23-7148-2, 05-5844-5, 19-1098-3, 26-6728-5, 26-6692-3

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Document Group:	24-0677-5	Version Number:	4.01
Issue Date:	10/21/25	Supersedes Date:	06/19/24

SECTION 1: Identification

1.1. Product identifier

3M™ Abrasive Products, 777F includes Roloc™, Stikit™

1.2. Recommended use and restrictions on use

Recommended use

Abrasive Product, For industrial/occupational use only. Not for consumer sale or use.

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Abrasive Systems 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

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable

Pictograms

Not applicable

39% of the mixture consists of ingredients of unknown acute dermal toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Ceramic Aluminum Oxide / Aluminum Oxide Mineral	1344-28-1	10 - 40

Blend (non-fibrous)		
Cloth Backing	Mixture	5 - 40
Cured Resin	Mixture	5 - 40
PSA	Mixture	<= 20
Filler	13983-17-0	< 15
Filler 2	1317-65-3	1 - 15
Potassium Fluoroborate	14075-53-7	2 - 15
Inorganic Fluoride	15096-52-3	< 10
Attachment Button	Mixture	<= 10
Pigment	1332-37-2	< 1.5
Titanium Dioxide	13463-67-7	< 1.5

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:

Do not induce vomiting. Rinse mouth. If you feel unwell, get medical attention.

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

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Exposure to extreme heat can give rise to thermal decomposition.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide

Carbon dioxide

Condition

During Combustion

During Combustion

5.3. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Not applicable.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not breathe thermal decomposition products. For industrial/occupational use only. Not for consumer sale or use. Avoid breathing of dust created by sanding, grinding or machining. Damaged product can break apart during use and cause serious injury to face or eyes. Check product for damage such as cracks or nicks prior to use. Replace if damaged. Always wear eye and face protection when working at sanding or grinding operations or when near such operations. Avoid release to the environment. Combustible dust may form by action of this product on another material (substrate). Dust generated from the substrate during use of this product may be explosive if in sufficient concentration with an ignition source. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions.

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
Filler 2	1317-65-3	OSHA	TWA(as total dust):15 mg/m ³ ;TWA(respirable fraction):5 mg/m ³	
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	1344-28-1	OSHA	TWA(as total dust):15 mg/m ³ ;TWA(respirable fraction):5 mg/m ³	
Titanium Dioxide	13463-67-7	ACGIH	TWA(Respirable nanoscale particles):0.2 mg/m ³ ;TWA(Respirable finescale particles):2.5 mg/m ³	A3: Confirmed animal carcin.
Titanium Dioxide	13463-67-7	OSHA	TWA(as total dust):15 mg/m ³	
Filler	13983-17-0	ACGIH	TWA(inhalable fraction):1 mg/m ³	A4: Not class. as human carcin
FLUORIDE AS DUST	15096-52-3	OSHA	TWA(as F):2.5 mg/m ³ ;TWA(as dust):2.5 mg/m ³	
Fluorides, as F	15096-52-3	ACGIH	TWA(as F):2.5 mg/m ³	A4: Not class. as human

carcin

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

For those situations where the material might be exposed to extreme overheating due to misuse or equipment failure, use with appropriate local exhaust ventilation sufficient to maintain levels of thermal decomposition products below their exposure guidelines. Provide appropriate local exhaust ventilation for sanding, grinding or machining. 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. 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).

8.2.2. Personal protective equipment (PPE)

Eye/face protection

To minimize the risk of injury to face and eyes, always wear eye and face protection when working at sanding or grinding operations or when near such operations. 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

Wear appropriate gloves to minimize risk of injury to skin from contact with dust or physical abrasion from grinding or sanding.

Respiratory protection

Assess exposure concentrations of all materials involved in the work process. Consider material being abraded when determining the appropriate respiratory protection. Select and use appropriate respirators to prevent inhalation overexposure.

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:

For those situations where the material might be exposed to extreme overheating due to misuse or equipment failure, use a positive pressure supplied-air respirator.

Half facepiece or full facepiece air-purifying respirator suitable for 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
Color	Red
Odor	Slight Polymeric
Odor threshold	<i>Not Applicable</i>
pH	<i>Not Applicable</i>

Melting point/Freezing point	Not Applicable
Boiling point/Initial boiling point/Boiling range	Not Applicable
Flash Point	Not Applicable
Evaporation rate	Not Applicable
Flammability	Not Applicable
Flammable Limits(LEL)	Not Applicable
Flammable Limits(UEL)	Not Applicable
Vapor Pressure	Not Applicable
Relative Vapor Density	Not Applicable
Density	Not Applicable
Relative Density	Not Applicable
Water solubility	Not Applicable
Solubility- non-water	Not Applicable
Partition coefficient: n-octanol/ water	Not Applicable
Autoignition temperature	Not Applicable
Decomposition temperature	Not Applicable
Kinematic Viscosity	Not Applicable
Volatile Organic Compounds	No Data Available
Percent volatile	No Data Available
VOC Less H2O & Exempt Solvents	No Data Available

Particle Characteristics	Not Applicable
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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

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Substance

Hydrogen Fluoride

Condition

At Elevated Temperatures

Refer to section 5.2 for hazardous decomposition products during combustion.

Extreme heat arising from situations such as misuse or equipment failure can generate hydrogen fluoride as a decomposition product.

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:

Dust from grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

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

Eye Contact:

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

Dust created by grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

No health effects are expected.

Carcinogenicity:

<u>Ingredient</u>	<u>CAS No.</u>	<u>Class Description</u>	<u>Regulation</u>
Titanium dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Additional Information:

This product, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards. This document covers only the product. For complete assessment, when determining the degree of hazard, the material being abraded must also be considered. This product contains titanium dioxide. Cancer of the lungs has been observed in rats that inhaled high levels of titanium dioxide. No exposure to inhaled titanium dioxide is expected during the normal handling and use of this product. Titanium dioxide was not detected when air sampling was conducted during simulated use of similar products containing titanium dioxide. Therefore, the health effects associated with titanium dioxide are not expected during the normal use of this product.

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

<u>Name</u>	<u>Route</u>	<u>Species</u>	<u>Value</u>
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend	Ingestion	Rat	LD50 > 5,000 mg/kg

(non-fibrous)			
Potassium Fluoroborate	Dermal		LD50 estimated to be > 5,000 mg/kg
Potassium Fluoroborate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.3 mg/l
Potassium Fluoroborate	Ingestion	Rat	LD50 5,854 mg/kg
Filler	Ingestion	Rat	LD50 > 5,000 mg/kg
Filler	Dermal	similar compounds	LD50 > 5,000 mg/kg
Filler	Inhalation-Dust/Mist (4 hours)	similar compounds	LC50 > 2.08 mg/l
Filler 2	Dermal	Rat	LD50 > 2,000 mg/kg
Filler 2	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3 mg/l
Filler 2	Ingestion	Rat	LD50 6,450 mg/kg
Inorganic Fluoride	Dermal	Rabbit	LD50 > 2,100 mg/kg
Inorganic Fluoride	Inhalation-Dust/Mist (4 hours)	Rat	LC50 4.5 mg/l
Inorganic Fluoride	Ingestion	Rat	LD50 5,000 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
Pigment	Dermal	Not available	LD50 3,100 mg/kg
Pigment	Ingestion	Not available	LD50 3,700 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	Rabbit	No significant irritation
Potassium Fluoroborate	Rabbit	No significant irritation
Filler	similar compounds	No significant irritation
Filler 2	Rabbit	No significant irritation
Inorganic Fluoride	Multiple animal species	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation
Pigment	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	Rabbit	No significant irritation
Potassium Fluoroborate	Rabbit	No significant irritation
Filler	similar compounds	Mild irritant
Filler 2	Rabbit	No significant irritation
Inorganic Fluoride	Rabbit	Mild irritant
Titanium Dioxide	Rabbit	No significant irritation
Pigment	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
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Filler	Human	Not classified
Titanium Dioxide	Human and animal	Not classified
Pigment	Human	Not classified

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
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	In Vitro	Not mutagenic
Filler	In Vitro	Not mutagenic
Filler	In vivo	Not mutagenic
Titanium Dioxide	In Vitro	Not mutagenic
Titanium Dioxide	In vivo	Not mutagenic
Pigment	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	Inhalation	Rat	Not carcinogenic
Titanium Dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium Dioxide	Inhalation	Rat	Carcinogenic
Pigment	Inhalation	Human	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
Filler	Ingestion	Not classified for development	Multiple animal species	NOAEL 1,600 mg/kg/day	during organogenesis
Filler 2	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	prematuring & during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Filler 2	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.812 mg/l	90 minutes

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Filler	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Filler	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not	

				and animal	available	
Filler	Ingestion	liver kidney and/or bladder hematopoietic system	Not classified	Rat	NOAEL 2,500 mg/kg/day	2 years
Filler 2	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Inorganic Fluoride	Inhalation	bone, teeth, nails, and/or hair	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 0.0005 mg/l	5 months
Inorganic Fluoride	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 0.00021 mg/l	90 days
Inorganic Fluoride	Ingestion	bone, teeth, nails, and/or hair	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.58 mg/kg/day	14 weeks
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
Pigment	Inhalation	pulmonary fibrosis pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

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

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

The substrate that was abraded must be considered as a factor in the disposal method for this product. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Combustion products will include HF. Facility must be capable of handling halogenated materials.

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

Not Applicable.

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

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.

The NFPA Health code of 3 is due to emergency situations where the material may thermally decompose and release Hydrogen Fluoride. During normal use conditions, please reference Section 2 and Section 11 of the SDS for additional health hazard information.

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Safety Data Sheet

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Document Group:	05-5844-5	Version Number:	17.20
Issue Date:	10/19/17	Supersedes Date:	09/26/17

SECTION 1: Identification

1.1. Product identifier

3M™ Scotch-Brite™ Products, Surface Conditioning, AVFN: Sheets, Rolls, Belts, Scrim Belts, Discs, Roloc™ TN, TP, TR, TS, TSM

1.2. Recommended use and restrictions on use

Recommended use

Abrasive Product

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Abrasive Systems 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

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable.

81% of the mixture consists of ingredients of unknown acute oral toxicity.

84% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Aluminum Oxide Mineral (non-fibrous)	1344-28-1	25 - 50
Titanium Dioxide	13463-67-7	0.5 - 2.5
Lubricant	64742-54-7	0.45 - 1
Cured Resin	Mixture	25 - 50
Nylon Fiber	Mixture	10 - 20
Nylon Scrim	Mixture	5 - 10
Poly (Vinyl Chloride)	9002-86-2	0.5 - 1.7
Attachment Button	Mixture	0 - 5

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:

No need for first aid is anticipated.

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide
Carbon dioxide

Condition

During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Observe precautions from other sections.

6.2. Environmental precautions

Not applicable.

6.3. Methods and material for containment and cleaning up

Not applicable.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. Avoid breathing of dust created by sanding, grinding or machining. Damaged product can break apart during use and cause serious injury to face or eyes. Check product for damage such as cracks or nicks prior to use. Replace if damaged. Always wear eye and face protection when working at sanding or grinding operations or when near such operations. Combustible dust may form by action of this product on another material (substrate). Dust generated from the substrate during use of this product may be explosive if in sufficient concentration with an ignition source. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions.

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
Aluminum, insoluble compounds	1344-28-1	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin
Aluminum Oxide Mineral (non-fibrous)	1344-28-1	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
Titanium Dioxide	13463-67-7	ACGIH	TWA:10 mg/m3	A4: Not class. as human carcin
Titanium Dioxide	13463-67-7	OSHA	TWA(as total dust):15 mg/m3	
Poly (Vinyl Chloride)	9002-86-2	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin

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 appropriate local exhaust ventilation for sanding, grinding or machining. 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. Warning: Excessive operating speed or generation of extreme heat may result in harmful emissions. Use local exhaust ventilation. Provide local exhaust at process emission sources to control exposure near the source and to prevent the escape of dust into the work area. 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).

8.2.2. Personal protective equipment (PPE)

Eye/face protection

To minimize the risk of injury to face and eyes, always wear eye and face protection when working at sanding or grinding operations or when near such operations. 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

Wear appropriate gloves to minimize risk of injury to skin from contact with dust or physical abrasion from grinding or sanding.

Respiratory protection

Assess exposure concentrations of all materials involved in the work process. Consider material being abraded when determining the appropriate respiratory protection. Select and use appropriate respirators to prevent inhalation overexposure. 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 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

General Physical Form:	Solid
Odor, Color, Grade:	Solid Abrasive Product
Odor threshold	<i>Not Applicable</i>
pH	<i>Not Applicable</i>
Melting point	<i>Not Applicable</i>
Boiling Point	<i>Not Applicable</i>
Flash Point	<i>Not Applicable</i>
Evaporation rate	<i>Not Applicable</i>
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Vapor Pressure	<i>Not Applicable</i>
Vapor Density	<i>Not Applicable</i>
Specific Gravity	<i>Not Applicable</i>
Solubility In Water	<i>Not Applicable</i>
Solubility- non-water	<i>Not Applicable</i>
Partition coefficient: n-octanol/ water	<i>Not Applicable</i>
Autoignition temperature	<i>Not Applicable</i>

Decomposition temperature	<i>Not Applicable</i>
Viscosity	<i>Not Applicable</i>
Hazardous Air Pollutants	<i>No Data Available</i>
Molecular weight	<i>No Data Available</i>
Percent volatile	<i>No Data Available</i>

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

Dust from grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

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

Eye Contact:

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

Dust created by grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

No known health effects.

Carcinogenicity:

Ingredient	CAS No.	Class Description	Regulation
Titanium Dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Additional Information:

This document covers only the 3M product. For complete assessment, when determining the degree of hazard, the material being abraded must also be considered.

This product contains titanium dioxide. Cancer of the lungs has been observed in rats that inhaled high levels of titanium dioxide. No exposure to inhaled titanium dioxide is expected during the normal handling and use of this product. Titanium dioxide was not detected when air sampling was conducted during simulated use of similar products containing titanium dioxide. Therefore, the health effects associated with titanium dioxide are not expected during the normal use of this product.

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	Ingestion		No data available; calculated ATE >5,000 mg/kg
Aluminum Oxide Mineral (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminum Oxide Mineral (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminum Oxide Mineral (non-fibrous)	Ingestion	Rat	LD50 > 5,000 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
Poly (Vinyl Chloride)	Dermal		LD50 estimated to be > 5,000 mg/kg
Poly (Vinyl Chloride)	Ingestion		LD50 estimated to be > 5,000 mg/kg
Lubricant	Dermal	Rabbit	LD50 > 5,000 mg/kg
Lubricant	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Rabbit	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation
Poly (Vinyl Chloride)	Professional judgement	No significant irritation
Lubricant	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
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Aluminum Oxide Mineral (non-fibrous)	Rabbit	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation
Lubricant	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
Titanium Dioxide	Human and animal	Not classified
Lubricant	Guinea pig	Not classified

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
Aluminum Oxide Mineral (non-fibrous)	In Vitro	Not mutagenic
Titanium Dioxide	In Vitro	Not mutagenic
Titanium Dioxide	In vivo	Not mutagenic
Poly (Vinyl Chloride)	In Vitro	Not mutagenic
Lubricant	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Inhalation	Rat	Not carcinogenic
Titanium Dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium Dioxide	Inhalation	Rat	Carcinogenic
Poly (Vinyl Chloride)	Not Specified	Rat	Some positive data exist, but the data are not sufficient for classification
Lubricant	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Poly (Vinyl Chloride)	Not Specified	Not classified for development	Mouse	NOAEL Not available	during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Lubricant	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Lubricant	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgment	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
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Aluminum Oxide Mineral (non-fibrous)	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Aluminum Oxide Mineral (non-fibrous)	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
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
Poly (Vinyl Chloride)	Inhalation	respiratory system	Not classified	Multiple animal species	NOAEL 0.013 mg/l	22 months
Lubricant	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.21 mg/l	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.

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. The substrate that was abraded must be considered as a factor in the disposal method for this product. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory

requirements.

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - No Delayed Hazard - No

EPCRA 311/312 Hazard Classifications (effective January 1, 2018):

Physical Hazards

Not applicable

Health Hazards

Not applicable

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

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: 0 **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: 0 **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: 05-5844-5 **Version Number:** 17.20

Issue Date: 10/19/17

Supersedes Date: 09/26/17

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Safety Data Sheet

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Document Group: 24-8593-6
Issue Date: 10/19/17

Version Number: 1.16
Supersedes Date: 03/20/14

SECTION 1: Identification

1.1. Product identifier

3M™ Scotch-Brite™ Products, Surface Conditioning S SFN (Discs (includes Roloc™, TN, TP, TR, TS, TSM), Sheets, Rolls, Scrim Belts

1.2. Recommended use and restrictions on use

Recommended use

Abrasive Product

1.3. Supplier's details

MANUFACTURER: 3M
DIVISION: Abrasive Systems 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

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable.

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

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Silicon Carbide Mineral	409-21-2	30 - 45
Lubricant	68991-84-4	0.5 - 2
Titanium Dioxide	13463-67-7	0 - 0.21335
Quartz Silica	14808-60-7	0.01 - 0.12
Additive	68515-49-1	0 - 0.1
Carbon Black	1333-86-4	0 - 0.1
Poly Vinyl Chloride	9002-86-2	0.5 - 2
Cured Resin	Mixture	20 - 40
Nylon Fiber	Mixture	10 - 25
Nylon Scrim	Mixture	5 - 10
Roloc™ TN, TP, TR, TS, or TSM Metal Attachment	Mixture	0 - 5

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:

No need for first aid is anticipated.

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide
Carbon dioxide

Condition

During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Observe precautions from other sections.

6.2. Environmental precautions

Not applicable.

6.3. Methods and material for containment and cleaning up

Not applicable.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. Avoid breathing of dust created by sanding, grinding or machining. Damaged product can break apart during use and cause serious injury to face or eyes. Check product for damage such as cracks or nicks prior to use. Replace if damaged. Always wear eye and face protection when working at sanding or grinding operations or when near such operations. Combustible dust may form by action of this product on another material (substrate). Dust generated from the substrate during use of this product may be explosive if in sufficient concentration with an ignition source. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions.

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
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	
Titanium Dioxide	13463-67-7	ACGIH	TWA:10 mg/m3	A4: Not class. as human carcin
Titanium Dioxide	13463-67-7	OSHA	TWA(as total dust):15 mg/m3	
Quartz Silica	14808-60-7	ACGIH	TWA(respirable fraction):0.025 mg/m3	A2: Suspected human carcin.
Quartz Silica	14808-60-7	OSHA	TWA Table Z-1(respirable):0.05 mg/m3;TWA Table Z-3(respirable):0.1 mg/m3	
Silicon Carbide Mineral	409-21-2	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
Poly Vinyl Chloride	9002-86-2	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin

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 appropriate local exhaust ventilation for sanding, grinding or machining. 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. Warning: Excessive operating speed or generation of extreme heat may result in harmful emissions. Use local exhaust ventilation. Provide local exhaust at process emission sources to control exposure near the source and to prevent the escape of dust into the work area. 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).

8.2.2. Personal protective equipment (PPE)

Eye/face protection

To minimize the risk of injury to face and eyes, always wear eye and face protection when working at sanding or grinding operations or when near such operations. 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

Wear appropriate gloves to minimize risk of injury to skin from contact with dust or physical abrasion from grinding or sanding.

Respiratory protection

Assess exposure concentrations of all materials involved in the work process. Consider material being abraded when determining the appropriate respiratory protection. Select and use appropriate respirators to prevent inhalation overexposure. 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 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

General Physical Form:	Solid
Odor, Color, Grade:	Solid Abrasive Product
Odor threshold	<i>Not Applicable</i>
pH	<i>Not Applicable</i>
Melting point	<i>Not Applicable</i>
Boiling Point	<i>Not Applicable</i>
Flash Point	<i>Not Applicable</i>
Evaporation rate	<i>Not Applicable</i>
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	<i>Not Applicable</i>

Flammable Limits(UEL)	Not Applicable
Vapor Pressure	Not Applicable
Vapor Density	Not Applicable
Density	Not Applicable
Specific Gravity	Not Applicable
Solubility In Water	Not Applicable
Solubility- non-water	Not Applicable
Partition coefficient: n-octanol/ water	Not Applicable
Autoignition temperature	Not Applicable
Decomposition temperature	Not Applicable
Viscosity	Not Applicable

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

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

Dust from grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough,

sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

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

Eye Contact:

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

Dust created by grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

No known health effects.

Carcinogenicity:

Ingredient	CAS No.	Class Description	Regulation
SILICA, CRYST AIRRESP	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens
Carbon Black	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Quartz Silica	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Titanium Dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Additional Information:

This document covers only the 3M product. For complete assessment, when determining the degree of hazard, the material being abraded must also be considered.

This product contains titanium dioxide and quartz (crystalline) silica. Cancer of the lungs has been associated with inhalation of high levels of titanium dioxide in animal studies, and occupational exposure to inhaled quartz silica has been associated with silicosis and lung cancer. No exposure to titanium dioxide or quartz silica is expected during the normal handling and use of this product. Titanium dioxide and quartz silica were not detected when air sampling was conducted during simulated use of similar products containing these substances. Therefore, the health effects associated with titanium dioxide and quartz (crystalline) silica are not expected during the normal use of this product.

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	Ingestion		No data available; calculated ATE >5,000 mg/kg
Silicon Carbide Mineral	Dermal	Rat	LD50 > 2,000 mg/kg
Silicon Carbide Mineral	Ingestion	Rat	LD50 > 2,000 mg/kg
Poly Vinyl Chloride	Dermal		LD50 estimated to be > 5,000 mg/kg
Poly Vinyl Chloride	Ingestion		LD50 estimated to be > 5,000 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
Quartz Silica	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz Silica	Ingestion		LD50 estimated to be > 5,000 mg/kg
Additive	Dermal	Rabbit	LD50 > 3,160 mg/kg
Carbon Black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Additive	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 12.5 mg/l
Additive	Ingestion	Rat	LD50 > 9,700 mg/kg
Carbon Black	Ingestion	Rat	LD50 > 8,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Silicon Carbide Mineral	Rat	No significant irritation
Poly Vinyl Chloride	Professional judgement	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation
Quartz Silica	Professional judgement	No significant irritation
Additive	Rabbit	Minimal irritation
Carbon Black	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Silicon Carbide Mineral	Professional judgement	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation
Additive	Rabbit	Mild irritant
Carbon Black	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Titanium Dioxide	Human and animal	Not classified
Additive	Guinea pig	Not classified

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
Poly Vinyl Chloride	In Vitro	Not mutagenic
Titanium Dioxide	In Vitro	Not mutagenic
Titanium Dioxide	In vivo	Not mutagenic
Quartz Silica	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz Silica	In vivo	Some positive data exist, but the data are not sufficient for classification
Additive	In Vitro	Not mutagenic
Additive	In vivo	Not mutagenic
Carbon Black	In Vitro	Not mutagenic
Carbon Black	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Poly Vinyl Chloride	Not Specified	Rat	Some positive data exist, but the data are not sufficient for classification
Titanium Dioxide	Ingestion	Multiple	Not carcinogenic

		animal species	
Titanium Dioxide	Inhalation	Rat	Carcinogenic
Quartz Silica	Inhalation	Human and animal	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
Poly Vinyl Chloride	Not Specified	Not classified for development	Mouse	NOAEL Not available	during gestation
Additive	Ingestion	Not classified for female reproduction	Rat	NOAEL 927 mg/kg/day	2 generation
Additive	Ingestion	Not classified for male reproduction	Rat	NOAEL 929 mg/kg/day	2 generation
Additive	Ingestion	Toxic to development	Rat	NOAEL 38 mg/kg/day	2 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Poly Vinyl Chloride	Inhalation	respiratory system	Not classified	Multiple animal species	NOAEL 0.013 mg/l	22 months
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
Quartz Silica	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Additive	Inhalation	respiratory system hematopoietic system liver	Not classified	Rat	NOAEL 0.5 mg/l	2 weeks
Additive	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 0.5 mg/l	2 generation
Additive	Ingestion	endocrine system	Not classified	Rat	NOAEL 686 mg/kg/day	90 days
Additive	Ingestion	liver kidney and/or bladder heart	Not classified	Rat	NOAEL 500 mg/kg/day	90 days
Additive	Ingestion	hematopoietic system	Not classified	Dog	NOAEL 320 mg/kg/day	90 days
Carbon Black	Inhalation	pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

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

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

The substrate that was abraded must be considered as a factor in the disposal method for this product. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes.

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - No Delayed Hazard - No

EPCRA 311/312 Hazard Classifications (effective January 1, 2018):

Physical Hazards

Not applicable

Health Hazards

Not applicable

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

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: 0 **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: 0 **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).

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Document Group:	19-1098-3	Version Number:	7.00
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SECTION 1: Identification

1.1. Product identifier

3M™ Scotch-Brite™ Bristle Disc, Scotch-Brite™ Radial Bristle Disc, Scotch-Brite™ Radial Bristle Brush, Scotch-Brite™ Roloc™ Body Man's Bristle Disc

1.2. Recommended use and restrictions on use

Recommended use

Abrasive Product

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Abrasive Systems 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

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable.

89% of the mixture consists of ingredients of unknown acute oral toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Cured Resin	Mixture	40 - 90
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	1344-28-1	15 - 35
Roloc Button	Mixture	<= 5
Titanium Dioxide	13463-67-7	< 1

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

No need for first aid is anticipated.

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:

No need for first aid is anticipated.

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

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide

Carbon dioxide

Condition

During Combustion

During Combustion

5.3. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Observe precautions from other sections.

6.2. Environmental precautions

Not applicable.

6.3. Methods and material for containment and cleaning up

Not applicable.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid breathing of dust created by sanding, grinding or machining. Damaged product can break apart during use and cause serious injury to face or eyes. Check product for damage such as cracks or nicks prior to use. Replace if damaged. Always wear eye and face protection when working at sanding or grinding operations or when near such operations. Combustible dust may form by action of this product on another material (substrate). Dust generated from the substrate during use of this product may be explosive if in sufficient concentration with an ignition source. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions.

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
Aluminum, insoluble compounds	1344-28-1	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	1344-28-1	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
Titanium Dioxide	13463-67-7	ACGIH	TWA:10 mg/m3	A4: Not class. as human carcin
Titanium Dioxide	13463-67-7	OSHA	TWA(as total dust):15 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

Provide appropriate local exhaust ventilation for sanding, grinding or machining. 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. 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).

8.2.2. Personal protective equipment (PPE)

Eye/face protection

To minimize the risk of injury to face and eyes, always wear eye and face protection when working at sanding or grinding

operations or when near such operations. 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

Wear appropriate gloves to minimize risk of injury to skin from contact with dust or physical abrasion from grinding or sanding.

Respiratory protection

Assess exposure concentrations of all materials involved in the work process. Consider material being abraded when determining the appropriate respiratory protection. Select and use appropriate respirators to prevent inhalation overexposure.

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 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

Multicolor

Odor

Slight Polymeric

Odor threshold

Not Applicable

pH

Not Applicable

Melting point

Not Applicable

Boiling Point

Not Applicable

Flash Point

Not Applicable

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

Specific Gravity

Not Applicable

Solubility In Water

Not Applicable

Solubility- non-water

Not Applicable

Partition coefficient: n-octanol/ water

Not Applicable

Autoignition temperature

Not Applicable

Decomposition temperature

Not Applicable

Viscosity

Not Applicable

Hazardous Air Pollutants

No Data Available

Molecular weight

No Data Available

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 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

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

Dust from grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

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

Eye Contact:

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

Dust created by grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

No health effects are expected.

Carcinogenicity:

Ingredient	CAS No.	Class Description	Regulation
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Titanium dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
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Additional Information:

This document covers only the 3M product. For complete assessment, when determining the degree of hazard, the material being abraded must also be considered.

This product contains titanium dioxide. Cancer of the lungs has been observed in rats that inhaled high levels of titanium dioxide. No exposure to inhaled titanium dioxide is expected during the normal handling and use of this product. Titanium dioxide was not detected when air sampling was conducted during simulated use of similar products containing titanium dioxide. Therefore, the health effects associated with titanium dioxide are not expected during the normal use of this product.

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	Ingestion		No data available; calculated ATE >5,000 mg/kg
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	Ingestion	Rat	LD50 > 5,000 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

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	Rabbit	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	Rabbit	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Titanium Dioxide	Human and animal	Not classified

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
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	In Vitro	Not mutagenic
Titanium Dioxide	In Vitro	Not mutagenic
Titanium Dioxide	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	Inhalation	Rat	Not carcinogenic
Titanium Dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium Dioxide	Inhalation	Rat	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

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

Target Organ(s)

Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
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

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.

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. The substrate that was abraded must be considered as a factor in the disposal method for this product. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

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

Not applicable

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>
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous)	1344-28-1	15 - 35
Ceramic Aluminum Oxide / Aluminum Oxide Mineral Blend (non-fibrous) (ALUMINUM OXIDE (FIBROUS FORMS ONLY))	1344-28-1	15 - 35

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

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: 0 **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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SECTION 1: Identification

1.1. Product identifier

3M™ Scotch-Brite™ Products, EXL Unitized S FIN, S MED, S VFN Products, Wheels, Blocks, Discs, Roloc™ TR, Roloc™ TS

1.2. Recommended use and restrictions on use

Recommended use

Abrasive Product

1.3. Supplier's details

MANUFACTURER: 3M
DIVISION: Abrasive Systems 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

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Silicon Carbide Mineral	409-21-2	35 - 55
Lubricant	4485-12-5	2 - 5
Talc	14807-96-6	3 - 10
Lubricant	64742-52-5	0.05 - 0.5
Quartz Silica	14808-60-7	0.02 - 0.25
Cured Resin	Mixture	20 - 35
Nylon Fiber	Mixture	5 - 15
Cloth Backing	Mixture	3 - 8
Attachment Button	Mixture	0 - 5

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:

No need for first aid is anticipated.

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide

Carbon dioxide

Condition

During Combustion

During Combustion

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Observe precautions from other sections.

6.2. Environmental precautions

Not applicable.

6.3. Methods and material for containment and cleaning up

Not applicable.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. Do not use in a confined area with minimal air exchange. Damaged product can break apart during use and cause serious injury to face or eyes. Check product for damage such as cracks or nicks prior to use. Replace if damaged. Always wear eye and face protection when working at sanding or grinding operations or when near such operations. Combustible dust may form by action of this product on another material (substrate). Dust generated from the substrate during use of this product may be explosive if in sufficient concentration with an ignition source. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions.

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
Talc	14807-96-6	ACGIH	TWA(respirable fraction):2 mg/m3	A4: Not class. as human carcin
Talc	14807-96-6	OSHA	TWA:2 mg/m3	
Quartz Silica	14808-60-7	ACGIH	TWA(respirable fraction):0.025 mg/m3	A2: Suspected human carcin.
Quartz Silica	14808-60-7	OSHA	TWA Table Z-1(respirable):0.05 mg/m3;TWA Table Z-3(respirable):0.1 mg/m3	
Silicon Carbide Mineral	409-21-2	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
STEARATES	4485-12-5	ACGIH	TWA(inhalable fraction):10 mg/m3;TWA(respirable fraction):3 mg/m3	A4: Not class. as human carcin
Paraffin oil	64742-52-5	OSHA	TWA(as mist):5 mg/m3	
PETROLEUM DISTILLATES	64742-52-5	OSHA	TWA:2000 mg/m3(500 ppm)	

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 appropriate local exhaust ventilation for sanding, grinding or machining. 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. Warning: Excessive operating speed or generation of extreme heat may result in harmful emissions. Use local exhaust ventilation. Provide local exhaust at process emission sources to control exposure near the source and to prevent the escape of dust into the work area. 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).

8.2.2. Personal protective equipment (PPE)

Eye/face protection

To minimize the risk of injury to face and eyes, always wear eye and face protection when working at sanding or grinding operations or when near such operations. 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

Wear appropriate gloves to minimize risk of injury to skin from contact with dust or physical abrasion from grinding or sanding.

Respiratory protection

Assess exposure concentrations of all materials involved in the work process. Consider material being abraded when determining the appropriate respiratory protection. Select and use appropriate respirators to prevent inhalation overexposure. 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 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

General Physical Form:	Solid
Odor, Color, Grade:	Solid Abrasive Product
Odor threshold	<i>Not Applicable</i>
pH	<i>Not Applicable</i>
Melting point	<i>Not Applicable</i>
Boiling Point	<i>Not Applicable</i>
Flash Point	<i>Not Applicable</i>
Evaporation rate	<i>Not Applicable</i>
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Vapor Pressure	<i>Not Applicable</i>
Vapor Density	<i>Not Applicable</i>

Density	Not Applicable
Specific Gravity	Not Applicable
Solubility In Water	Not Applicable
Solubility- non-water	Not Applicable
Partition coefficient: n-octanol/ water	Not Applicable
Autoignition temperature	Not Applicable
Decomposition temperature	Not Applicable
Viscosity	Not Applicable
Molecular weight	No Data Available

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

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
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None known.	
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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:

Dust from grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

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

Eye Contact:

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

Dust created by grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

No known health effects.

Carcinogenicity:

<u>Ingredient</u>	<u>CAS No.</u>	<u>Class Description</u>	<u>Regulation</u>
SILICA, CRYST AIRRESP	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens
Quartz Silica	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer

Additional Information:

This document covers only the 3M product. For complete assessment, when determining the degree of hazard, the material being abraded must also be considered.

This product contains a form of crystalline silica. Occupational exposure to inhaled crystalline silica has been associated with silicosis and lung cancer. No exposure to crystalline silica is expected during the normal handling and use of this product. Therefore, the health effects associated with crystalline silica are not expected during normal use of this product.

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

<u>Name</u>	<u>Route</u>	<u>Species</u>	<u>Value</u>
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Silicon Carbide Mineral	Dermal	Rat	LD50 > 2,000 mg/kg
Silicon Carbide Mineral	Ingestion	Rat	LD50 > 2,000 mg/kg
Talc	Dermal		LD50 estimated to be > 5,000 mg/kg
Talc	Ingestion		LD50 estimated to be > 5,000 mg/kg
Lubricant	Dermal		LD50 estimated to be > 5,000 mg/kg
Lubricant	Ingestion	Rat	LD50 > 5,000 mg/kg
Lubricant	Dermal	Rabbit	LD50 > 2,000 mg/kg
Lubricant	Ingestion	Rat	LD50 > 5,000 mg/kg
Quartz Silica	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz Silica	Ingestion		LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

<u>Name</u>	<u>Species</u>	<u>Value</u>
Silicon Carbide Mineral	Rat	No significant irritation
Talc	Rabbit	No significant irritation
Lubricant	similar compounds	No significant irritation
Lubricant	Rabbit	Minimal irritation
Quartz Silica	Professional judgement	No significant irritation

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Serious Eye Damage/Irritation

Name	Species	Value
Silicon Carbide Mineral	Professional judgement	No significant irritation
Talc	Rabbit	No significant irritation
Lubricant	similar compounds	Mild irritant
Lubricant	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
Lubricant	Guinea pig	Not classified

Respiratory Sensitization

Name	Species	Value
Talc	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic
Quartz Silica	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz Silica	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Talc	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Lubricant	Ingestion	Rat	Not carcinogenic
Lubricant	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Quartz Silica	Inhalation	Human and animal	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Talc	Ingestion	Not classified for development	Rat	NOAEL 1,600 mg/kg	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
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Lubricant	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
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Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Talc	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pulmonary fibrosis respiratory system	Not classified	Rat	NOAEL 18 mg/m3	113 weeks
Quartz Silica	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

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

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. The substrate that was abraded must be considered as a factor in the disposal method for this product. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

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

Not applicable

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

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: 0 **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: 0 **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: 26-6692-3
Issue Date: 03/05/18

Version Number: 1.19
Supersedes Date: 05/19/15

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Safety Data Sheet

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Document Group: 26-6728-5
Issue Date: 07/05/18

Version Number: 1.12
Supersedes Date: 05/19/15

SECTION 1: Identification

1.1. Product identifier

3M™ Scotch-Brite™ Products, EXL Unitized AMED, Products, Wheels, Blocks, Discs, Roloc™ TR; TS

1.2. Recommended use and restrictions on use

Recommended use

Abrasive Product

1.3. Supplier's details

MANUFACTURER: 3M
DIVISION: Abrasive Systems 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

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Aluminum Oxide Mineral (non-fibrous)	1344-28-1	35 - 50

Inorganic Fluoride	14075-53-7	3 - 10
Talc	14807-96-6	3 - 10
Lubricant	4485-12-5	1 - 5
Titanium Dioxide	13463-67-7	0.25 - 1.5
Lubricant	64742-52-5	0.01 - 0.5
Cured Resin	Mixture	20 - 35
Nylon Fiber	Mixture	5 - 15
Polyester Scrim	Mixture	2 - 10
Attachment Button	Mixture	0 - 5

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:

No need for first aid is anticipated.

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide
Carbon dioxide

Condition

During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Observe precautions from other sections.

6.2. Environmental precautions

Not applicable.

6.3. Methods and material for containment and cleaning up

Not applicable.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

For industrial or professional use only. Avoid breathing of dust created by sanding, grinding or machining. Damaged product can break apart during use and cause serious injury to face or eyes. Check product for damage such as cracks or nicks prior to use. Replace if damaged. Always wear eye and face protection when working at sanding or grinding operations or when near such operations. Combustible dust may form by action of this product on another material (substrate). Dust generated from the substrate during use of this product may be explosive if in sufficient concentration with an ignition source. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions.

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
Aluminum Oxide Mineral (non-fibrous)	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	
Talc	14807-96-6	ACGIH	TWA(respirable fraction):2 mg/m ³	A4: Not class. as human carcin
Talc	14807-96-6	OSHA	TWA:2 mg/m ³	
STEARATES	4485-12-5	ACGIH	TWA(inhalable fraction):10 mg/m ³ ;TWA(respirable fraction):3 mg/m ³	A4: Not class. as human carcin
Paraffin oil	64742-52-5	OSHA	TWA(as mist):5 mg/m ³	
PETROLEUM DISTILLATES	64742-52-5	OSHA	TWA:2000 mg/m ³ (500 ppm)	

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 appropriate local exhaust ventilation for sanding, grinding or machining. 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. Warning: Excessive operating speed or generation of extreme heat may result in harmful emissions. Use local exhaust ventilation. Provide local exhaust at process emission sources to control exposure near the source and to prevent the escape of dust into the work area. 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).

8.2.2. Personal protective equipment (PPE)**Eye/face protection**

To minimize the risk of injury to face and eyes, always wear eye and face protection when working at sanding or grinding operations or when near such operations. 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

Wear appropriate gloves to minimize risk of injury to skin from contact with dust or physical abrasion from grinding or sanding.

Respiratory protection

Assess exposure concentrations of all materials involved in the work process. Consider material being abraded when determining the appropriate respiratory protection. Select and use appropriate respirators to prevent inhalation overexposure. 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 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**

General Physical Form:	Solid
Odor, Color, Grade:	Solid Abrasive Product
Odor threshold	<i>Not Applicable</i>
pH	<i>Not Applicable</i>
Melting point	<i>Not Applicable</i>
Boiling Point	<i>Not Applicable</i>
Flash Point	<i>Not Applicable</i>
Evaporation rate	<i>Not Applicable</i>
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Vapor Pressure	<i>Not Applicable</i>
Vapor Density	<i>Not Applicable</i>
Density	<i>Not Applicable</i>
Specific Gravity	<i>Not Applicable</i>
Solubility In Water	<i>Not Applicable</i>
Solubility- non-water	<i>Not Applicable</i>

Partition coefficient: n-octanol/ water

Not Applicable

Autoignition temperature

Not Applicable

Decomposition temperature

Not Applicable

Viscosity

Not Applicable

Molecular weight

No Data Available

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

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

Dust from grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

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

Eye Contact:

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

Dust created by grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

No known health effects.

Carcinogenicity:

<u>Inгредиент</u>	<u>CAS No.</u>	<u>Class Description</u>	<u>Regulation</u>
Titanium Dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Additional Information:

This document covers only the 3M product. For complete assessment, when determining the degree of hazard, the material being abraded must also be considered.

This product contains titanium dioxide. Cancer of the lungs has been observed in rats that inhaled high levels of titanium dioxide. No exposure to inhaled titanium dioxide is expected during the normal handling and use of this product. Titanium dioxide was not detected when air sampling was conducted during simulated use of similar products containing titanium dioxide. Therefore, the health effects associated with titanium dioxide are not expected during the normal use of this product.

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

<u>Name</u>	<u>Route</u>	<u>Species</u>	<u>Value</u>
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Aluminum Oxide Mineral (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminum Oxide Mineral (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminum Oxide Mineral (non-fibrous)	Ingestion	Rat	LD50 > 5,000 mg/kg
Inorganic Fluoride	Dermal		LD50 estimated to be > 5,000 mg/kg
Inorganic Fluoride	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.3 mg/l
Inorganic Fluoride	Ingestion	Rat	LD50 5,854 mg/kg
Talc	Dermal		LD50 estimated to be > 5,000 mg/kg
Talc	Ingestion		LD50 estimated to be > 5,000 mg/kg
Lubricant	Dermal		LD50 estimated to be > 5,000 mg/kg
Lubricant	Ingestion	Rat	LD50 > 5,000 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
Lubricant	Dermal	Rabbit	LD50 > 2,000 mg/kg
Lubricant	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

<u>Name</u>	<u>Species</u>	<u>Value</u>
Aluminum Oxide Mineral (non-fibrous)	Rabbit	No significant irritation
Inorganic Fluoride	Rabbit	No significant irritation
Talc	Rabbit	No significant irritation
Lubricant	similar compound	No significant irritation

Titanium Dioxide	Rabbit	No significant irritation
Lubricant	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Rabbit	No significant irritation
Inorganic Fluoride	Rabbit	No significant irritation
Talc	Rabbit	No significant irritation
Lubricant	similar compound	Mild irritant
Titanium Dioxide	Rabbit	No significant irritation
Lubricant	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
Titanium Dioxide	Human and animal	Not classified
Lubricant	Guinea pig	Not classified

Respiratory Sensitization

Name	Species	Value
Talc	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
Aluminum Oxide Mineral (non-fibrous)	In Vitro	Not mutagenic
Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic
Titanium Dioxide	In Vitro	Not mutagenic
Titanium Dioxide	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Inhalation	Rat	Not carcinogenic
Talc	Inhalation	Rat	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
Lubricant	Ingestion	Rat	Not carcinogenic
Lubricant	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Talc	Ingestion	Not classified for development	Rat	NOAEL 1,600 mg/kg	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Lubricant	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
Aluminum Oxide Mineral (non-fibrous)	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Aluminum Oxide Mineral (non-fibrous)	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pulmonary fibrosis respiratory system	Not classified	Rat	NOAEL 18 mg/m3	113 weeks
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

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.

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. The substrate that was abraded must be considered as a factor in the disposal method for this product. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

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

Not applicable

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

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: 0 **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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Issue Date: 07/05/18

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Safety Data Sheet

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Document Group: 23-7148-2
Issue Date: 08/16/23

Version Number: 2.00
Supersedes Date: 09/26/17

SECTION 1: Identification

1.1. Product identifier

3M™ Scotch-Brite™ Products, Surface Conditioning: AMED: Sheets, Hookit™, Rolls, Discs (Roloc™, TN, TP, TR, TS, TSM), Belts, Scrim Belts

1.2. Recommended use and restrictions on use

Recommended use

Abrasive Product, For industrial/occupational use only. Not for consumer sale or use.

1.3. Supplier's details

MANUFACTURER: 3M
DIVISION: Abrasive Systems 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

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable.

35% of the mixture consists of ingredients of unknown acute oral toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Aluminum Oxide Mineral (non-fibrous)	1344-28-1	25 - 45 Trade Secret *
Cured Resin	Mixture	20 - 40 Trade Secret *
Nylon Fiber	Mixture	10 - 25 Trade Secret *
Nylon Scrim	Mixture	5 - 15 Trade Secret *
Attachment Button	Mixture	< 10 Trade Secret *
Filler	1317-65-3	3 - 8 Trade Secret *
Poly(Vinyl Chloride)	9002-86-2	1 - 2.5 Trade Secret *
Lubricant	64742-54-7	1 - 2 Trade Secret *
Titanium Dioxide	13463-67-7	0.5 - 1.5 Trade Secret *
Quartz Silica	14808-60-7	< 0.2 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:

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:

Do not induce vomiting. Rinse mouth. If you feel unwell, get medical attention.

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

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide

Carbon dioxide

Condition

During Combustion

During Combustion

5.3. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Observe precautions from other sections.

6.2. Environmental precautions

Not applicable.

6.3. Methods and material for containment and cleaning up

Not applicable.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Avoid breathing of dust created by sanding, grinding or machining. Damaged product can break apart during use and cause serious injury to face or eyes. Check product for damage such as cracks or nicks prior to use. Replace if damaged. Always wear eye and face protection when working at sanding or grinding operations or when near such operations. Combustible dust may form by action of this product on another material (substrate). Dust generated from the substrate during use of this product may be explosive if in sufficient concentration with an ignition source. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions.

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
Filler	1317-65-3	OSHA	TWA(as total dust):15 mg/m ³ ;TWA(respirable fraction):5 mg/m ³	
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	1317-65-3	ACGIH	TWA(inhalable particulates):10 mg/m ³	
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles	1317-65-3	ACGIH	TWA(respirable particles):3 mg/m ³	
Aluminum Oxide Mineral (non-fibrous)	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
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	1344-28-1	ACGIH	TWA(inhalable particulates):10 mg/m ³	
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles	1344-28-1	ACGIH	TWA(respirable particles):3 mg/m ³	

Titanium Dioxide	13463-67-7	ACGIH	TWA(Respirable nanoscale particles):0.2 mg/m3;TWA(Respirable finescale particles):2.5 mg/m3	A3: Confirmed animal carcin.
Titanium Dioxide	13463-67-7	OSHA	TWA(as total dust):15 mg/m3	
Quartz Silica	14808-60-7	ACGIH	TWA(respirable fraction):0.025 mg/m3	A2: Suspected human carcin.
Quartz Silica	14808-60-7	OSHA	TWA Table Z-1(respirable):0.05 mg/m3;TWA Table Z-3(respirable):0.1 mg/m3;TWA concentration(respirable):0.1 mg/m3(2.4 millions of particles/cu. ft.)	
MINERAL OILS, HIGHLY-REFINED OILS	64742-54-7	ACGIH	TWA(inhalable fraction):5 mg/m3	A4: Not class. as human carcin
Paraffin oil	64742-54-7	OSHA	TWA(as mist):5 mg/m3	
DUST, INERT OR NUISANCE	9002-86-2	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)	
Poly(Vinyl Chloride)	9002-86-2	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin

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 appropriate local exhaust ventilation for sanding, grinding or machining. 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. Warning: Excessive operating speed or generation of extreme heat may result in harmful emissions. Use local exhaust ventilation. Provide local exhaust at process emission sources to control exposure near the source and to prevent the escape of dust into the work area. 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).

8.2.2. Personal protective equipment (PPE)

Eye/face protection

To minimize the risk of injury to face and eyes, always wear eye and face protection when working at sanding or grinding operations or when near such operations. 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

Wear appropriate gloves to minimize risk of injury to skin from contact with dust or physical abrasion from grinding or sanding.

Respiratory protection

Assess exposure concentrations of all materials involved in the work process. Consider material being abraded when determining the appropriate respiratory protection. Select and use appropriate respirators to prevent inhalation overexposure.

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 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
Color

Solid
Red

Odor

Slight Polymeric

Odor threshold

Not Applicable

pH

Not Applicable

Melting point

Not Applicable

Boiling Point

Not Applicable

Flash Point

Not Applicable

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

Specific Gravity

Not Applicable

Solubility In Water

Not Applicable

Solubility- non-water

Not Applicable

Partition coefficient: n-octanol/ water

Not Applicable

Autoignition temperature

Not Applicable

Decomposition temperature

Not Applicable

Viscosity

Not Applicable

Hazardous Air Pollutants

No Data Available

Molecular weight

No Data Available

Percent volatile

No Data Available

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

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Substance

Condition

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:

Dust from grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

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

Eye Contact:

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

Dust created by grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

No known health effects.

Carcinogenicity:

<u>Ingredient</u>	<u>CAS No.</u>	<u>Class Description</u>	<u>Regulation</u>
Silica, Crystalline (Respirable Size)	14808-60-7	Known To Be Human Carcinogen.	National Toxicology Program Carcinogens
Silica dust, crystalline, in the form of quartz or cristobalite	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Titanium dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Additional Information:

This document covers only the 3M product. For complete assessment, when determining the degree of hazard, the material being abraded must also be considered.

This product contains titanium dioxide and quartz (crystalline) silica. Cancer of the lungs has been associated with inhalation of high levels of titanium dioxide in animal studies, and occupational exposure to inhaled quartz silica has been associated with silicosis and lung cancer. No exposure to titanium dioxide or quartz silica is expected during the normal handling and use of this product. Titanium dioxide and quartz silica were not detected when air sampling was conducted during simulated use of similar products containing these substances. Therefore, the health effects associated with titanium dioxide and quartz (crystalline) silica are not expected during the normal use of this product.

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	Ingestion		No data available; calculated ATE >5,000 mg/kg
Aluminum Oxide Mineral (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminum Oxide Mineral (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminum Oxide Mineral (non-fibrous)	Ingestion	Rat	LD50 > 5,000 mg/kg
Filler	Dermal	Rat	LD50 > 2,000 mg/kg
Filler	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3 mg/l
Filler	Ingestion	Rat	LD50 6,450 mg/kg
Poly(Vinyl Chloride)	Dermal		LD50 estimated to be > 5,000 mg/kg
Poly(Vinyl Chloride)	Ingestion		LD50 estimated to be > 5,000 mg/kg
Lubricant	Dermal	Rabbit	LD50 > 5,000 mg/kg
Lubricant	Ingestion	Rat	LD50 > 5,000 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
Quartz Silica	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz Silica	Ingestion		LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Rabbit	No significant irritation
Filler	Rabbit	No significant irritation
Poly(Vinyl Chloride)	Professional judgement	No significant irritation
Lubricant	Rabbit	Minimal irritation
Titanium Dioxide	Rabbit	No significant irritation
Quartz Silica	Professional judgement	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Rabbit	No significant irritation
Filler	Rabbit	No significant irritation

Lubricant	Rabbit	Mild irritant
Titanium Dioxide	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Lubricant	Guinea pig	Not classified
Titanium Dioxide	Human and animal	Not classified

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
Aluminum Oxide Mineral (non-fibrous)	In Vitro	Not mutagenic
Poly(Vinyl Chloride)	In Vitro	Not mutagenic
Lubricant	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
Quartz Silica	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz Silica	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Inhalation	Rat	Not carcinogenic
Poly(Vinyl Chloride)	Not Specified	Rat	Some positive data exist, but the data are not sufficient for classification
Lubricant	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
Quartz Silica	Inhalation	Human and animal	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Filler	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	premating & during gestation
Poly(Vinyl Chloride)	Not Specified	Not classified for development	Mouse	NOAEL Not available	during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Filler	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.812 mg/l	90 minutes

Lubricant	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Lubricant	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Aluminum Oxide Mineral (non-fibrous)	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Aluminum Oxide Mineral (non-fibrous)	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Filler	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Poly(Vinyl Chloride)	Inhalation	respiratory system	Not classified	Multiple animal species	NOAEL 0.013 mg/l	22 months
Lubricant	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.21 mg/l	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
Quartz Silica	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

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

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. The substrate that was abraded must be considered as a factor in the disposal method for this product. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

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

Not applicable

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 Mineral (non-fibrous)	1344-28-1	Trade Secret 25 - 45
Aluminum Oxide Mineral (non-fibrous) (ALUMINUM OXIDE (FIBROUS FORMS ONLY))	1344-28-1	Trade Secret 25 - 45

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

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: 0 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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Document Group: 24-2516-3
Issue Date: 03/28/23

Version Number: 1.25
Supersedes Date: 04/09/18

SECTION 1: Identification

1.1. Product identifier

3M™ Scotch-Brite™ Surface Conditioning, ACRS -Discs (Roloc™, TN, TP, TR, TS, TSM), Sheets, Rolls, Belts

1.2. Recommended use and restrictions on use

Recommended use

Abrasive Product, For industrial/occupational use only. Not for consumer sale or use.

1.3. Supplier's details

MANUFACTURER: 3M
DIVISION: Abrasive Systems 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

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable.

55% of the mixture consists of ingredients of unknown acute oral toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Cured Resin	Mixture	25 - 55

Aluminum Oxide Mineral (non-fibrous)	1344-28-1	20 - 45
Nylon Fiber	Mixture	10 - 20
Nylon Scrim	Mixture	2 - 10
Filler	1317-65-3	2 - 5
Roloc™ TN, TP, TR, or TS Metal Attachment	Mixture	< 5
Lubricant	64742-54-7	0.5 - 3
Poly(Vinyl Chloride)	9002-86-2	0.2 - 1.5
Titanium Dioxide	13463-67-7	0.2 - 1.5
Quartz Silica	14808-60-7	0.001 - 0.12

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:

Do not induce vomiting. Rinse mouth. If you feel unwell, get medical attention.

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

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide

Carbon dioxide

Condition

During Combustion

During Combustion

5.3. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Observe precautions from other sections.

6.2. Environmental precautions

Not applicable.

6.3. Methods and material for containment and cleaning up

Not applicable.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Avoid breathing of dust created by sanding, grinding or machining. Damaged product can break apart during use and cause serious injury to face or eyes. Check product for damage such as cracks or nicks prior to use. Replace if damaged. Always wear eye and face protection when working at sanding or grinding operations or when near such operations. Combustible dust may form by action of this product on another material (substrate). Dust generated from the substrate during use of this product may be explosive if in sufficient concentration with an ignition source. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions.

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
Filler	1317-65-3	OSHA	TWA(as total dust):15 mg/m ³ ;TWA(respirable fraction):5 mg/m ³	
Aluminum Oxide Mineral (non-fibrous)	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(Respirable nanoscale particles):0.2 mg/m ³ ;TWA(Respirable finescale particles):2.5 mg/m ³	A3: Confirmed animal carcin.
Titanium Dioxide	13463-67-7	OSHA	TWA(as total dust):15 mg/m ³	
Quartz Silica	14808-60-7	ACGIH	TWA(respirable fraction):0.025 mg/m ³	A2: Suspected human carcin.
Quartz Silica	14808-60-7	OSHA	TWA Table Z-1(respirable):0.05 mg/m ³ ;TWA Table Z-3(respirable):0.1 mg/m ³ ;TWA concentration(respirable):0.1 mg/m ³ (2.4 millions of particles/cu. ft.)	
Poly(Vinyl Chloride)	9002-86-2	ACGIH	TWA(respirable fraction):1 mg/m ³	A4: Not class. as human carcin

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 appropriate local exhaust ventilation for sanding, grinding or machining. 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. Warning: Excessive operating speed or generation of extreme heat may result in harmful emissions. Use local exhaust ventilation. Provide local exhaust at process emission sources to control exposure near the source and to prevent the escape of dust into the work area. 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).

8.2.2. Personal protective equipment (PPE)

Eye/face protection

To minimize the risk of injury to face and eyes, always wear eye and face protection when working at sanding or grinding operations or when near such operations. 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

Wear appropriate gloves to minimize risk of injury to skin from contact with dust or physical abrasion from grinding or sanding.

Respiratory protection

Assess exposure concentrations of all materials involved in the work process. Consider material being abraded when determining the appropriate respiratory protection. Select and use appropriate respirators to prevent inhalation overexposure.

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 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

Multicolor

Odor

Slight Polymeric

Odor threshold

Not Applicable

pH

Not Applicable

Melting point

Not Applicable

Boiling Point

Not Applicable

Flash Point

Not Applicable

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

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

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
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None known.	
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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:

Dust from grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough,

sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

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

Eye Contact:

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

Dust created by grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

No known health effects.

Carcinogenicity:

Ingredient	CAS No.	Class Description	Regulation
SILICA, CRYSTALLINE (RESPIRABLE SIZE)	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens
SILICA DUST, CRYSTALLINE, IN THE FORM OF QUARTZ OR CRISTOBALITE	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
TITANIUM DIOXIDE	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Additional Information:

This product, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards. This document covers only the 3M product. For complete assessment, when determining the degree of hazard, the material being abraded must also be considered.

This product contains titanium dioxide and quartz (crystalline) silica. Cancer of the lungs has been associated with inhalation of high levels of titanium dioxide in animal studies, and occupational exposure to inhaled quartz silica has been associated with silicosis and lung cancer. No exposure to titanium dioxide or quartz silica is expected during the normal handling and use of this product. Titanium dioxide and quartz silica were not detected when air sampling was conducted during simulated use of similar products containing these substances. Therefore, the health effects associated with titanium dioxide and quartz (crystalline) silica are not expected during the normal use of this product.

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	Ingestion		No data available; calculated ATE >5,000 mg/kg
Aluminum Oxide Mineral (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminum Oxide Mineral (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminum Oxide Mineral (non-fibrous)	Ingestion	Rat	LD50 > 5,000 mg/kg
Filler	Dermal	Rat	LD50 > 2,000 mg/kg
Filler	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3 mg/l
Filler	Ingestion	Rat	LD50 6,450 mg/kg
Lubricant	Dermal	Rabbit	LD50 > 5,000 mg/kg
Lubricant	Ingestion	Rat	LD50 > 5,000 mg/kg
Titanium Dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium Dioxide	Inhalation-	Rat	LC50 > 6.82 mg/l

	Dust/Mist (4 hours)		
Titanium Dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
Poly(Vinyl Chloride)	Dermal		LD50 estimated to be > 5,000 mg/kg
Poly(Vinyl Chloride)	Ingestion		LD50 estimated to be > 5,000 mg/kg
Quartz Silica	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz Silica	Ingestion		LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Rabbit	No significant irritation
Filler	Rabbit	No significant irritation
Lubricant	Rabbit	Minimal irritation
Titanium Dioxide	Rabbit	No significant irritation
Poly(Vinyl Chloride)	Professional judgement	No significant irritation
Quartz Silica	Professional judgement	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Rabbit	No significant irritation
Filler	Rabbit	No significant irritation
Lubricant	Rabbit	Mild irritant
Titanium Dioxide	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Lubricant	Guinea pig	Not classified
Titanium Dioxide	Human and animal	Not classified

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
Aluminum Oxide Mineral (non-fibrous)	In Vitro	Not mutagenic
Lubricant	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
Poly(Vinyl Chloride)	In Vitro	Not mutagenic
Quartz Silica	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz Silica	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Inhalation	Rat	Not carcinogenic

Lubricant	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
Poly(Vinyl Chloride)	Not Specified	Rat	Some positive data exist, but the data are not sufficient for classification
Quartz Silica	Inhalation	Human and animal	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Filler	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	premating & during gestation
Poly(Vinyl Chloride)	Not Specified	Not classified for development	Mouse	NOAEL Not available	during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Filler	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.812 mg/l	90 minutes
Lubricant	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Lubricant	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Aluminum Oxide Mineral (non-fibrous)	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Aluminum Oxide Mineral (non-fibrous)	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Filler	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Lubricant	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.21 mg/l	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
Poly(Vinyl Chloride)	Inhalation	respiratory system	Not classified	Multiple animal species	NOAEL 0.013 mg/l	22 months
Quartz Silica	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

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

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. The substrate that was abraded must be considered as a factor in the disposal method for this product. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

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

Not applicable

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

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: 0 **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: 0 **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).

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Issue Date:	03/28/23	Supersedes Date:	04/09/18

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Issue Date:	10/02/24	Supersedes Date:	07/06/18

SECTION 1: Identification

1.1. Product identifier

3M™ Scotch-Brite™ Products, EXL Unitized Wheels, Blocks, Slabs A-CRS

1.2. Recommended use and restrictions on use

Recommended use

Abrasive Product, For industrial/occupational use only. Not for consumer sale or use.

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Abrasive Systems 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

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable.

43% of the mixture consists of ingredients of unknown acute oral toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Aluminum Oxide Mineral (non-fibrous)	1344-28-1	50 - 70 Trade Secret *

Cured Resin	Mixture	20 - 45 Trade Secret *
Nylon Backing Plate	Mixture	< 15 Trade Secret *
Nylon Fiber	Mixture	2 - 10 Trade Secret *
Roloc Button Attachment	Mixture	< 5 Trade Secret *
Titanium Dioxide	13463-67-7	< 2 Trade Secret *
Cloth Backing	Mixture	< 2 Trade Secret *
Silica	7631-86-9	< 0.5 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:

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:

Do not induce vomiting. Rinse mouth. If you feel unwell, get medical attention.

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

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide
Carbon dioxide

Condition

During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Observe precautions from other sections.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Not applicable.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

For industrial/occupational use only. Not for consumer sale or use. Avoid breathing of dust created by sanding, grinding or machining. Damaged product can break apart during use and cause serious injury to face or eyes. Check product for damage such as cracks or nicks prior to use. Replace if damaged. Always wear eye and face protection when working at sanding or grinding operations or when near such operations. Combustible dust may form by action of this product on another material (substrate). Dust generated from the substrate during use of this product may be explosive if in sufficient concentration with an ignition source. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions.

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
Aluminum Oxide Mineral (non-fibrous)	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
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	1344-28-1	ACGIH	TWA(inhalable particulates):10 mg/m ³	
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles	1344-28-1	ACGIH	TWA(respirable particles):3 mg/m ³	
Titanium Dioxide	13463-67-7	ACGIH	TWA(Respirable nanoscale particles):0.2 mg/m ³ ;TWA(Respirable finescale particles):2.5 mg/m ³	A3: Confirmed animal carcin.
Titanium Dioxide	13463-67-7	OSHA	TWA(as total dust):15 mg/m ³	
DUST, INERT OR NUISANCE	7631-86-9	OSHA	TWA(as total dust):50 millions of particles/cu. ft.(15 mg/m ³);TWA(respirable fraction):15 millions of particles/cu. ft.(5 mg/m ³)	
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	7631-86-9	ACGIH	TWA(inhalable particulates):10 mg/m ³	
Particles (insoluble or poorly soluble) not otherwise specified,	7631-86-9	ACGIH	TWA(respirable particles):3 mg/m ³	

respirable particles				
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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 appropriate local exhaust ventilation for sanding, grinding or machining. 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. Warning: Excessive operating speed or generation of extreme heat may result in harmful emissions. Use local exhaust ventilation. Provide local exhaust at process emission sources to control exposure near the source and to prevent the escape of dust into the work area. 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).

8.2.2. Personal protective equipment (PPE)

Eye/face protection

To minimize the risk of injury to face and eyes, always wear eye and face protection when working at sanding or grinding operations or when near such operations. 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

Wear appropriate gloves to minimize risk of injury to skin from contact with dust or physical abrasion from grinding or sanding.

Respiratory protection

Assess exposure concentrations of all materials involved in the work process. Consider material being abraded when determining the appropriate respiratory protection. Select and use appropriate respirators to prevent inhalation overexposure.

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 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

Gray

Odor

Slight Resinous

Odor threshold

Not Applicable

pH

Not Applicable

Melting point

Not Applicable

Boiling Point

Not Applicable

Flash Point	Not Applicable
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	Not Applicable
Solubility In Water	Not Applicable
Solubility- non-water	Not Applicable
Partition coefficient: n-octanol/ water	Not Applicable
Autoignition temperature	Not Applicable
Decomposition temperature	Not Applicable
Viscosity	Not Applicable
Molecular weight	No Data Available

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

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
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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:

Dust from grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

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

Eye Contact:

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

Dust created by grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

No known health effects.

Carcinogenicity:

Ingredient	CAS No.	Class Description	Regulation
Titanium dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Additional Information:

This document covers only the product. For complete assessment, when determining the degree of hazard, the material being abraded must also be considered. This product contains titanium dioxide. Cancer of the lungs has been observed in rats that inhaled high levels of titanium dioxide. No exposure to inhaled titanium dioxide is expected during the normal handling and use of this product. Titanium dioxide was not detected when air sampling was conducted during simulated use of similar products containing titanium dioxide. Therefore, the health effects associated with titanium dioxide are not expected during the normal use of this product.

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	Ingestion		No data available; calculated ATE >5,000 mg/kg
Aluminum Oxide Mineral (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminum Oxide Mineral (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminum Oxide Mineral (non-fibrous)	Ingestion	Rat	LD50 > 5,000 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
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

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Rabbit	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation
Silica	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Rabbit	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation
Silica	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Titanium Dioxide	Human and animal	Not classified
Silica	Human and animal	Not classified

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
Aluminum Oxide Mineral (non-fibrous)	In Vitro	Not mutagenic
Titanium Dioxide	In Vitro	Not mutagenic
Titanium Dioxide	In vivo	Not mutagenic
Silica	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Inhalation	Rat	Not carcinogenic
Titanium Dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium Dioxide	Inhalation	Rat	Carcinogenic
Silica	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

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

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

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Aluminum Oxide Mineral (non-fibrous)	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for	Human	NOAEL Not available	occupational exposure

			classification			
Aluminum Oxide Mineral (non-fibrous)	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
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
Silica	Inhalation	respiratory system silicosis	Not classified	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

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

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information**Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations**13.1. Disposal methods**

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

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. The substrate that was abraded must be considered as a factor in the disposal method for this product. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

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

Not applicable

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

Aluminum Oxide Mineral (non-fibrous)

C.A.S. No

1344-28-1

% by Wt

Trade Secret 50 - 70

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

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:** 0 **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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