

Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3MTM Abrasive Products, CubitronTM II Fibre Discs, 982C 36+, 60+, 80+, TN, TR, TSM, and GL Attachment, Slotted

Product Identification Numbers

1.2. Recommended use and restrictions on use

Recommended use

Abrasive Product

1.3. Supplier's details

MANUFACTURER:

DIVISION: Abrasive Systems Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA 1-888-3M HELPS (1-888-364-3577) **Telephone:**

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.

2.3. Hazards not otherwise classified

None.

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88% of the mixture consists of ingredients of unknown acute oral toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Ceramic Aluminum Oxide (non-fibrous)	1344-28-1	10 - 30
Inorganic Fluoride	15096-52-3	5 - 20 Trade Secret *
Inorganic Fluoride	7789-75-5	0.25 - 1.5
Filler	1317-65-3	1 - 5
Lanthanum Trioxide	1312-81-8	0.1 - 2
Cured Resin	Mixture	5 - 15
Fibre Backing	Mixture	40 - 70
Steel or Plastic Attachment	Mixture	0 - 5

^{*}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:

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
Hydrogen Fluoride

Condition

During Combustion
During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Filler	1317-65-3	US Dept of	TWA(as total dust):15	
		Labor - OSHA	mg/m3;TWA(respirable	
			fraction):5 mg/m3	
Ceramic Aluminum Oxide (non-	1344-28-1	Chemical	TWA:1 fiber/cc	
fibrous)		Manufacturer		
		Rec Guid		
Ceramic Aluminum Oxide (non-	1344-28-1	US Dept of	TWA(as total dust):15	
fibrous)		Labor - OSHA	mg/m3;TWA(respirable	
			fraction):5 mg/m3	
FLUORIDES	15096-52-3	Amer Conf of	TWA(as F):2.5 mg/m3	
		Gov. Indust.		
		Hyg.		
FLUORIDES	15096-52-3	US Dept of	TWA(as dust):2.5	
		Labor - OSHA	mg/m3;TWA(as F):2.5 mg/m3	
FLUORIDES	7789-75-5	Amer Conf of	TWA(as F):2.5 mg/m3	
		Gov. Indust.		
		Hyg.		

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FLUORIDES	7789-75-5	US Dept of	TWA(as dust):2.5
		Labor - OSHA	mg/m3;TWA(as F):2.5 mg/m3

Amer Conf of Gov. Indust. Hyg.: American Conference of Governmental Industrial Hygienists

American Indust. Hygiene Assoc : American Industrial Hygiene Association

Chemical Manufacturer Rec Guid : Chemical Manufacturer's Recommended Guidelines

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

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. 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:

As a good industrial hygiene practice:

In case of inadequate ventilation wear respiratory protection.

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 thresholdNot ApplicablepHNot ApplicableMelting pointNot Applicable

Boiling PointNot ApplicableFlash PointNot ApplicableEvaporation rateNot ApplicableFlammability (solid, gas)Not ClassifiedFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not ApplicableVapor PressureNot Applicable

Vapor Density Not Applicable

DensityNot ApplicableSpecific GravityNot ApplicableSolubility In WaterNot Applicable

Solubility- non-water Not Applicable

Partition coefficient: n-octanol/ waterNot ApplicableAutoignition temperatureNot ApplicableDecomposition temperatureNot ApplicableViscosityNot 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.

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

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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.

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 (non-fibrous)			Data not available or insufficient for classification
Inorganic Fluoride	Dermal	Rabbit	LD50 > 2,100 mg/kg
Inorganic Fluoride	Inhalation-	Rat	LC50 4.5 mg/l
	Dust/Mist		
	(4 hours)		
Inorganic Fluoride	Ingestion	Rat	LD50 5,000 mg/kg
Filler	Dermal	Rat	LD50 > 2,000 mg/kg
Filler	Inhalation-	Rat	LC50 3.0 mg/l
	Dust/Mist		
	(4 hours)		
Filler	Ingestion	Rat	LD50 6,450 mg/kg
Lanthanum Trioxide			Data not available or insufficient for classification
Inorganic Fluoride	Inhalation-	Rat	LC50 > 5.07 mg/l
	Dust/Mist		
	(4 hours)		
Inorganic Fluoride	Ingestion	Rat	LD50 > 2,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Ceramic Aluminum Oxide (non-fibrous)		Data not available or insufficient for classification
Inorganic Fluoride		Minimal irritation
Filler	Rabbit	No significant irritation
Lanthanum Trioxide		Data not available or insufficient for classification
Inorganic Fluoride		Data not available or insufficient for classification

Serious Eye Damage/Irritation

Name	Species	Value
Ceramic Aluminum Oxide (non-fibrous)		Data not available or insufficient for classification
Inorganic Fluoride		Moderate irritant
Filler	Rabbit	No significant irritation
Lanthanum Trioxide		Data not available or insufficient for classification
Inorganic Fluoride		Data not available or insufficient for classification

Skin Sensitization

Sim Schsitzation		
Name	Species Value	
Ceramic Aluminum Oxide (non-fibrous)	Data no	ot available or insufficient for classification
Inorganic Fluoride	Data no	ot available or insufficient for classification
Filler	Data no	ot available or insufficient for classification
Lanthanum Trioxide	Data no	ot available or insufficient for classification
Inorganic Fluoride	Data no	ot available or insufficient for classification

Respiratory Sensitization

Name	Species	Value
Ceramic Aluminum Oxide (non-fibrous)		Data not available or insufficient for classification
Inorganic Fluoride		Data not available or insufficient for classification
Filler		Data not available or insufficient for classification
Lanthanum Trioxide		Data not available or insufficient for classification
Inorganic Fluoride		Data not available or insufficient for classification

Germ Cell Mutagenicity

Name	Route Va	alue
Ceramic Aluminum Oxide (non-fibrous)	Da	ata not available or insufficient for classification
Inorganic Fluoride	Da	ata not available or insufficient for classification
Filler	Da	ata not available or insufficient for classification
Lanthanum Trioxide	Da	ata not available or insufficient for classification
Inorganic Fluoride	Da	ata not available or insufficient for classification

Carcinogenicity

Name	Route	Species	Value
Ceramic Aluminum Oxide (non-fibrous)			Data not available or insufficient for classification
Inorganic Fluoride			Data not available or insufficient for classification
Filler			Data not available or insufficient for classification
Lanthanum Trioxide			Data not available or insufficient for classification
Inorganic Fluoride			Data not available or insufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Ceramic Aluminum Oxide (non-fibrous)		Data not available or insufficient for classification			
Inorganic Fluoride		Data not available or insufficient for classification			
Filler	Ingestion	Not toxic to development	Rat	NOAEL 625 mg/kg/day	premating & during gestation
Lanthanum Trioxide		Data not available or insufficient for classification			

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Inorganic Fluoride	Data not available or insufficient for			
		classification		

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Ceramic Aluminum Oxide (non-fibrous)			Data not available or insufficient for classification			
Inorganic Fluoride			Data not available or insufficient for classification			
Filler	Inhalation	respiratory system	All data are negative	Rat	NOAEL 0.812 mg/l	90 minutes
Lanthanum Trioxide			Data not available or insufficient for classification			
Inorganic Fluoride			Data not available or insufficient for classification			

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Ceramic Aluminum Oxide (non-fibrous)			Data not available or insufficient for classification			
Inorganic Fluoride	Inhalation	bone, teeth, nails, and/or hair	Some positive data exist, but the data are not sufficient for classification		ННА	
Filler	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Lanthanum Trioxide			Data not available or insufficient for classification			
Inorganic Fluoride			Data not available or insufficient for classification			

Aspiration Hazard

Name	Value
Ceramic Aluminum Oxide (non-fibrous)	Not an aspiration hazard
Inorganic Fluoride	Not an aspiration hazard
Filler	Not an aspiration hazard
Lanthanum Trioxide	Not an aspiration hazard
Inorganic Fluoride	Not an aspiration hazard

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.

This product has been classified as a non-hazardous waste. 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. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. 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

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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