

# Safety Data Sheet

### Copyright, 2014, 3M Company.

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

Document Group:	23-9248-8	Version Number:	1.04
Issue Date:	03/25/14	Supercedes Date:	03/18/13

# **SECTION 1: Identification**

### 1.1. Product identifier

3M<sup>TM</sup> Green Corps<sup>TM</sup> Cut-Off Wheels

### 1.2. Recommended use and restrictions on use

#### **Recommended use** Abrasive Product

1.3. Supplier's details MANUFACTURER: DIVISION:	3M Abrasive Systems Division
ADDRESS: Telephone:	3M Center, St. Paul, MN 55144-1000, USA 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.

# **2.3. Hazards not otherwise classified** None.

# **SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
Ceramic Materials	66402-68-4	50 - 70
Fiberglass Backing	None	5 - 15
Inorganic Fluoride	60304-36-1	5 - 10
Inorganic Fluoride	15096-52-3	1 10
Cured Resin	Mixture	10 - 20

## **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

<u>Substance</u> Carbon monoxide Carbon dioxide <u>Condition</u> During Combustion During Combustion

## 5.3. Special protective actions for fire-fighters

No unusual fire or explosion hazards 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**

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

Avoid breathing of dust created by cutting, sanding, grinding or machining. For industrial or professional use only. 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**

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Aluminum, insoluble compounds	15096-52-3	Amer Conf of	TWA(respirable fraction):1	
		Gov. Indust.	mg/m3	
		Hyg.		
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	60304-36-1	Amer Conf of	TWA(as F):2.5 mg/m3	
		Gov. Indust.		
		Hyg.		
FLUORIDES	60304-36-1	US Dept of	TWA(as dust):2.5	
		Labor - OSHA	mg/m3;TWA(as F):2.5 mg/m3	
Fiberglass Backing	None	Manufacturer	TWA(as dust):10 mg/m3	
		determined		

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

Provide ventilation adequate to maintain dust concentration below minimum explosive concentrations. Provide appropriate local exhaust ventilation for cutting, grinding, sanding 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

General Physical Form:	Solid
Odor, Color, Grade:	Gray to Black Abrasive Wheel
Odor threshold	Not Applicable
рН	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 Viscosity Not Applicable 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> None known.

**Condition** 

Refer to section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

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

**11.1. Information on Toxicological effects** 

Signs and Symptoms of Exposure

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

### Inhalation:

Dust from cutting, 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 cutting, 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.

### **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	Inhalation-		No data available; calculated ATE > $12.5 \text{ mg/l}$
*	Dust/Mist(4		
	hr)		
Ceramic Materials	Dermal		LD50 estimated to be $> 5,000 \text{ mg/kg}$
Ceramic Materials	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Fiberglass Backing	Dermal		LD50 estimated to be $> 5,000 \text{ mg/kg}$
Fiberglass Backing	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
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

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value
Ceramic Materials	Rabbit	No significant irritation
Fiberglass Backing		No significant irritation
Inorganic Fluoride		Minimal irritation

#### Serious Eye Damage/Irritation

Name	Species	Value
Ceramic Materials	Rabbit	Mild irritant
Fiberglass Backing		No significant irritation
Inorganic Fluoride		Moderate irritant

### **Skin Sensitization**

Name	Species	Value

## **Respiratory Sensitization**

Name	Species	Value

### Germ Cell Mutagenicity

Name	Route	Value
Ceramic Materials	In Vitro	Some positive data exist, but the data are not
		sufficient for classification
Fiberglass Backing	In Vitro	Some positive data exist, but the data are not
		sufficient for classification

### Carcinogenicity

Name	Route	Species	Value
Ceramic Materials	Inhalation	Multiple	Some positive data exist, but the data are not
		animal	sufficient for classification

		species	
Fiberglass Backing	Inhalation	Multiple animal	Some positive data exist, but the data are not sufficient for classification
		species	

### **Reproductive Toxicity**

## **Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration

## Target Organ(s)

Specific Target Organ Toxicity - single exposure							
Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration	

### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Ceramic Materials	Inhalation	pulmonary fibrosis	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL not available	
Ceramic Materials	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL not available	occupational exposure
Fiberglass Backing	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL not available	occupational exposure
Inorganic Fluoride	Inhalation	bone, teeth, nails, and/or hair	Some positive data exist, but the data are not sufficient for classification		ННА	

## Aspiration Hazard

Tispirudon Huzuru	
Name	Value

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.

Proper destruction may require the use of additional fuel during incineration processes. Combustion products will include

halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. As a disposal alternative, utilize an acceptable permitted waste disposal facility. The substrate that was abraded must be considered as a factor in the disposal method for this product. Incinerate in a permitted waste incineration facility.

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 <u>not</u> 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.

### **HMIS Hazard Classification**

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

Hazardous Material Identification System (HMIS® III) 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® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

Document Group:	23-9248-8	Version Number:	1.04
Issue Date:	03/25/14	Supercedes Date:	03/18/13

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M

### 3M USA SDSs are available at www.3M.com