

# **Material Safety Data Sheet**

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# SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Standard Abrasives<sup>TM</sup> A/O SoftEdge, Flexible Edge Discs, Quick Change, Flexible Flap

Wheels

**MANUFACTURER:** 3M

**DIVISION:** Abrasives Systems Division

ADDRESS: 3M Center

St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 01/20/11 **Supercedes Date:** 01/14/11

**Document Group:** 28-4112-0

**Product Use:** 

Intended Use: Abrasive Product

# **SECTION 2: INGREDIENTS**

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
Aluminum Oxide Mineral	1344-28-1	15 - 50
Filler	1317-65-3	0.5 - 25
Inorganic Fluoride	15096-52-3	0.5 - 20
Quartz Silica	14808-60-7	0.01 - 0.25
Additive	13463-67-7	0 - 0.2
Additives	Unknown	0 - 5
Cured Resin	Mixture	5 - 25
Cloth Backing	Mixture	15 - 60
Steel Shank, Flanges	Mixture	0 - 15
Quick Change Attachment	Mixture	0 - 5

# **SECTION 3: HAZARDS IDENTIFICATION**

#### 3.1 EMERGENCY OVERVIEW

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Odor, Color, Grade: Solid Abrasive Product

General Physical Form: Solid

Immediate health, physical, and environmental hazards: This document covers only the Standard Abrasives product. For complete assessment, when determining the degree of hazard, the material being abraded must also be considered.

#### 3.2 POTENTIAL HEALTH EFFECTS

#### **Eve 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.

#### **Skin Contact:**

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

#### **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.

Prolonged or repeated exposure may cause:

Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

May be absorbed following inhalation and cause target organ effects.

#### **Ingestion:**

No health effects are expected.

#### **Target Organ Effects:**

Prolonged or repeated exposure may cause:

Hard Tissue Effects: Signs/symptoms may include color changes in the teeth and nails; changes in development of bone, teeth or nails; weakening of the bones; and/or hair loss.

This product contains quartz silica. Cancer of the lungs and silicosis have been associated with quartz (crystalline) silica. No exposure to quartz (crystalline) silica is anticipated during normal intended use of Standard Abrasives Coated and Surface Conditioning Abrasives. No detectable respirable quartz and other forms of crystalline silica were found when a simulated grinding air sampling study was conducted on analogous Coated Abrasive and Surface Conditioning constructions that contained similar to or greater concentrations of crystalline silica. Therefore, the health effects associated with crystalline silica (e.g. quartz) are not expected during the intended use of this product.

<u>Ingredient</u>	C.A.S. No.	Class Description	<b>Regulation</b>
Quartz Silica	14808-60-7	Grp. 1: Carcinogenic to	International Agency for Research on Cancer
		humans	
SILICA, CRYSTALLINE (AIRBORNE	SEQ677	Grp. 1: Carcinogenic to	International Agency for Research on Cancer
PARTICLES OF RESPIRABLE SIZE)		humans	
SILICA, CRYSTALLINE (AIRBORNE	SEQ677	Known human carcinogen	National Toxicology Program Carcinogens
PARTICI ES OF RESPIRARI E SIZE)		č	2, 2

# **SECTION 4: FIRST AID MEASURES**

# 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

**Skin Contact:** Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention. No need for first aid is anticipated.

# **SECTION 5: FIRE FIGHTING MEASURES**

#### **5.1 FLAMMABLE PROPERTIES**

Autoignition temperatureNot ApplicableFlash PointNot ApplicableFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not Applicable

#### 5.2 EXTINGUISHING MEDIA

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam).

#### 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA). **Unusual Fire and Explosion Hazards:** Not applicable. None inherent in this product.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

# SECTION 6: ACCIDENTAL RELEASE MEASURES

# ${\bf 6.1. \, Personal \, precautions, \, protective \, equipment \, and \, emergency \, procedures}$

Not applicable.

# 6.2. Environmental precautions

Not applicable.

### Clean-up methods

Not applicable.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

# **SECTION 7: HANDLING AND STORAGE**

#### 7.1 HANDLING

For industrial or professional use only. Avoid breathing of dust created by sanding, grinding or machining. Avoid eye contact with dust or airborne particles. 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. Sparks and particles flying from the product during sanding or grinding can cause injury and fire.

#### 7.2 STORAGE

Store in a cool, dry place.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 ENGINEERING CONTROLS

Provide ventilation adequate to control dust concentrations below recommended exposure limits and/or control dust. 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 Occupational Exposure Limits and/or control dust, fume, or airborne particles. If ventilation is not adequate, use respiratory protection equipment.

### **8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)**

#### 8.2.1 Eye/Face Protection

Avoid eye contact. 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. The following eye protection(s) are recommended: Safety Glasses with side shields.

#### 8.2.2 Skin Protection

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

## 8.2.3 Respiratory Protection

Avoid breathing of dust created by sanding, grinding or machining. 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. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with N95 particulate filters. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

## 8.2.4 Prevention of Swallowing

Not an expected route of exposure. Wash hands after handling and before eating.

#### 8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	Additional Information
Aluminum Oxide Mineral	CMRG	TWA	1 fiber/cc	
Aluminum Oxide Mineral	OSHA	TWA, respirable	5 mg/m3	
		fraction		
Aluminum Oxide Mineral	OSHA	TWA, as total dust	15 mg/m3	
FLUORIDES	ACGIH	TWA, as F	2.5 mg/m3	
FLUORIDES	OSHA	TWA, as dust	2.5 mg/m3	
FLUORIDES	OSHA	TWA, as F	2.5 mg/m3	
Filler	OSHA	TWA, respirable	5 mg/m3	
		fraction		

15 mg/m3

Filler **OSHA** TWA, as total dust 15 mg/m3 0.025 mg/m3 Quartz Silica TWA, respirable ACGIH fraction Quartz Silica **OSHA** TWA concentration, 0.1 mg/m3respirable Quartz Silica **OSHA** TWA concentration, 0.3 mg/m3 as total dust Additive **ACGIH** 10 mg/m3 TWA

Additive ACGIH I WA 10 mg/m3
Additive CMRG TWA, as respirable 5 mg/m3
dust

Additive OSHA TWA, as total dust

#### SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Odor, Color, Grade: Solid Abrasive Product

General Physical Form: Solid

Autoignition temperatureNot ApplicableFlash PointNot ApplicableFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not ApplicableBoiling PointNot Applicable

Vapor Density Not Applicable

Vapor Pressure Not Applicable

Specific GravityNot ApplicablepHNot ApplicableMelting pointNot ApplicableSolubility In WaterNot Applicable

Evaporation rateNot ApplicableKow - Oct/Water partition coefNot ApplicableViscosityNot Applicable

# **SECTION 10: STABILITY AND REACTIVITY**

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

None known

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

# **Hazardous Decomposition or By-Products**

**Substance** Condition

Carbon monoxide During Combustion
Carbon dioxide During Combustion

**Hazardous Decomposition:** Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

# **SECTION 11: TOXICOLOGICAL INFORMATION**

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

# **SECTION 12: ECOLOGICAL INFORMATION**

#### ECOTOXICOLOGICAL INFORMATION

Not determined.

#### CHEMICAL FATE INFORMATION

Not determined.

# **SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** The substrate that was abraded must be considered as a factor in the disposal method for this product. Dispose of waste product in a sanitary landfill. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

# 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. The manufacturer's classifications are based on product formulation, packaging, the manufacturer's policies and understanding of applicable current regulations. The manufacturer 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 Standard Abrasives 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**

#### US FEDERAL REGULATIONS

Contact manufacturer for more information.

#### 311/312 Hazard Categories:

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

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

IngredientC.A.S. No% by WtAluminum Oxide Mineral1344-28-115 - 50

#### STATE REGULATIONS

Contact manufacturer for more information.

#### CHEMICAL INVENTORIES

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

Contact manufacturer for more information.

#### INTERNATIONAL REGULATIONS

Contact manufacturer for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

# **SECTION 16: OTHER INFORMATION**

#### **NFPA Hazard Classification**

Health: 1 Flammability: 1 Reactivity: 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.

Revision Changes:

Section 1: Product name was modified. Page Heading: Product name was modified. Section 2: Ingredient table was modified.

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 $\begin{tabular}{ll} MATERIAL SAFETY DATA SHEET & Standard Abrasives \\ \begin{tabular}{ll} TM & A/O SoftEdge, Flexible Edge Discs, Quick Change, Flexible Flap Wheels \\ \begin{tabular}{ll} 01/20/11 & A/O SoftEdge, Flexible Edge Discs, Quick Change, Flexible Flap Wheels \\ \begin{tabular}{ll} 01/20/11 & A/O SoftEdge, Flexible Edge Discs, Quick Change, Flexible Flap Wheels \\ \begin{tabular}{ll} 01/20/11 & A/O SoftEdge, Flexible Edge Discs, Quick Change, Flexible Flap Wheels \\ \begin{tabular}{ll} 01/20/11 & A/O SoftEdge, Flexible Edge Discs, Quick Change, Flexible Flap Wheels \\ \begin{tabular}{ll} 01/20/11 & A/O SoftEdge, Flexible Edge Discs, Quick Change, Flexible Flap Wheels \\ \begin{tabular}{ll} 01/20/11 & A/O SoftEdge, Flexible Edge Discs, Quick Change, Flexible Flap Wheels \\ \begin{tabular}{ll} 01/20/11 & A/O SoftEdge, Flexible Edge Discs, Quick Change, Flexible Flap Wheels \\ \begin{tabular}{ll} 01/20/11 & A/O SoftEdge, Flexible Edge Discs, Quick Change, Flexible Edge Discs, Quic$ 

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