

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier**

<b>Product Name</b>	<b>Abrasive Blades - Rubber Bonded</b>
<b>Product Code(s)</b>	102301, 102501, 102502, 103001, 103002, 103501, 10-4060-010, 10-4061-010, 10-4120-010, 10-4127-010, 10-4145-010, 10-4150-010, 10-4160-010, 10-4161-010, 10-4227-010, 10-4245-010, 10-4250-010, 10-4260-010, 10-4261-010, 10-4310-010, 10-4320-010, 10-4345-010, 10-4350-010, 10-4360-010, 10-4361-010, 10-4445-010, 10-5110-010, 11-4207-010, 11-4217-010, 12-4145-010, 12-4205-010, 12-4305-010, 12-4405-010, 12-5605-010, 12-5645-010, 12-5845-010
<b>(M)SDS Number</b>	1545910_A

**Other means of identification**

<b>Synonyms</b>	None
-----------------	------

**Recommended use of the chemical and restrictions on use**

<b>Recommended Use</b>	Laboratory Use Only
<b>Uses advised against</b>	No information available

**Details of the supplier of the safety data sheet**

<b>Manufacturer</b>	Buehler
<b>Manufacturer Address</b>	41 Waukegan Rd Lake Bluff, IL 60044 www.buehler.com
<b>Phone number</b>	+1 847 295 6500
<b>E-mail Address</b>	custserv@buehler.com

**Emergency telephone number**

Global Access Code: 334545	
Americas: +1 760 476 3962	Asia Pacific: +1 760 476 3960
Middle East/Africa: +1 760 476 3959	Europe: +1 760 476 3961

**2. HAZARDS IDENTIFICATION****Classification**


The hazard identification is based on a formalistic procedure as the hazard statements of the ingredients are summarized in section 3. This does not correspond to the hazardousness of the product itself. A greater hazard, in most cases, is the exposure to the dust/fumes from the material or paint/coatings being ground. Most of the dust generated during grinding is from the base material being ground and the potential hazard from this exposure must be

evaluated. This dust may present a fire or dust explosion hazard and may present a serious health hazard.

Carcinogenicity	Category 1B
-----------------	-------------

**GHS Label elements, including precautionary statements**

**Emergency Overview**

<b>Signal word</b>	<b>Danger</b>	
<b>Hazard Statements</b>	May cause respiratory irritation May cause cancer	
		
<b>Appearance</b>	Dark	<b>Physical state</b> Solid
		<b>Odor</b> No data available

**Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

**Precautionary Statements - Storage**

None

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other information**

No information available

**Interactions with Other Chemicals**

No information available.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%	Trade Secret
Silicon carbide	409-21-2	0 - 95	*
Aluminum oxide	1344-28-1	0 - 95	*
Cured Rubber Compounds	N/A	1 - 20	*
Sulfur	7704-34-9	1 - 10	*
Cured Phenolic Resin	N/A	0 - 10	*
Potassium Fluoroborate	14075-53-7	0 - 5	*
Potassium Aluminum Fluoride	14484-69-6	0 - 5	*
Limestone	1317-65-3	0 - 5	*
Kaolin	1332-58-7	0 - 5	*
Iron oxide	1309-37-1	0 - 5	*
Calcium oxide	1305-78-8	0 - 5	*
Magnesium stearate	557-04-0	0 - 3	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret

### 4. FIRST AID MEASURES

#### First aid measures

<b>Eye contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash with soap and water.
<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person.

#### Most important symptoms and effects, both acute and delayed

**Most Important Symptoms and Effects** No information available.

#### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### **Unsuitable extinguishing media**

CAUTION: Use of water spray when fighting fire may be inefficient.

### **Specific hazards arising from the chemical**

No information available.

### **Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

### **Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### **Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation.

**Other Information** Refer to protective measures listed in Sections 7 and 8.

### **Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

### **Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### **Precautions for safe handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

### **Conditions for safe storage, including any incompatibilities**

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Products** Water. Acids.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Silicon carbide 409-21-2	TWA: 10 mg/m <sup>3</sup> nonfibrous, inhalable fraction, particulate matter containing no asbestos and <1% crystalline silica TWA: 3 mg/m <sup>3</sup> nonfibrous, respirable fraction, particulate matter containing no asbestos and <1% crystalline silica TWA: 0.1 fiber/cm <sup>3</sup> respirable fibers, including whiskers, length >5 μm, aspect ratio ≥3:1 as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination.	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust
Aluminum oxide 1344-28-1	TWA: 1 mg/m <sup>3</sup> respirable particulate matter	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	
Limestone 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 15 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> respirable dust TWA: 10 mg/m <sup>3</sup> total dust
Kaolin 1332-58-7	TWA: 2 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust
Iron oxide 1309-37-1	TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> fume TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> fume and total dust Iron oxide (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction regulated under Rouge	IDLH: 2500 mg/m <sup>3</sup> Fe dust and fume TWA: 5 mg/m <sup>3</sup> Fe dust and fume
Calcium oxide 1305-78-8	TWA: 2 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	IDLH: 25 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>
Magnesium stearate 557-04-0	TWA: 10 mg/m <sup>3</sup>	-	

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

**Other Exposure Guidelines**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992)

**Appropriate engineering controls**

**Engineering Measures**  
Showers  
Eyewash stations  
Ventilation systems

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** No special protective equipment required.

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures** Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical and Chemical Properties**

<b>Physical state</b>	Solid		
<b>Appearance</b>	Dark	<b>Odor</b>	No data available
<b>Color</b>	No information available	<b>Odor Threshold</b>	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
<b>pH</b>	No data available	None known	
<b>Melting / freezing point</b>	Not applicable	None known	
<b>Boiling point / boiling range</b>	Not applicable	None known	
<b>Flash Point</b>	No data available	None known	
<b>Evaporation Rate</b>	Not applicable	None known	
<b>Flammability (solid, gas)</b>	No data available	None known	
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit</b>	No data available		
<b>Lower flammability limit</b>	No data available		
<b>Vapor pressure</b>	Not applicable	None known	
<b>Vapor density</b>	Not applicable	None known	
<b>Specific Gravity</b>	Not applicable	None known	
<b>Water Solubility</b>	Insoluble		
<b>Solubility in other solvents</b>	No data available	None known	
<b>Partition coefficient: n-octanol/water</b>	Not applicable		
<b>Autoignition temperature</b>	No data available	None known	
<b>Decomposition temperature</b>	No data available	None known	
<b>Kinematic viscosity</b>	No data available	None known	
<b>Dynamic viscosity</b>	No data available	None known	
<b>Explosive properties</b>	No data available		
<b>Oxidizing properties</b>	No data available		

**Other Information**

<b>Softening Point</b>	No data available
<b>VOC Content (%)</b>	No data available
<b>Particle Size</b>	No data available
<b>Particle Size Distribution</b>	

## 10. STABILITY AND REACTIVITY

### Reactivity

Stable.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

None known based on information supplied.

### Incompatible materials

Water. Acids.

### Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors. Calcium oxides.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Specific test data for the substance or mixture is not available.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available.

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Aluminum oxide 1344-28-1	> 5000 mg/kg ( Rat )	-	-
Sulfur 7704-34-9	> 3000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 9.23 mg/L ( Rat ) 4 h
Kaolin 1332-58-7	> 5000 mg/kg ( Rat )	> 5000 mg/kg ( Rat )	-
Iron oxide 1309-37-1	> 10000 mg/kg ( Rat )	-	-
Calcium oxide 1305-78-8	= 500 mg/kg ( Rat )	-	-

### Information on toxicological effects

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.

**Mutagenic Effects** No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Silicon carbide 409-21-2	A2	Group 2A		X
Iron oxide 1309-37-1		Group 3		

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - *Suspected Human Carcinogen*

IARC (International Agency for Research on Cancer)

Group 2A - *Probably Carcinogenic to Humans*

Group 3 - *Not Classifiable as to Carcinogenicity in Humans*

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - *Present*

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Chronic Toxicity** Contains a known or suspected carcinogen.

**Target Organ Effects** Respiratory system. Eyes. Skin. Gastrointestinal tract (GI). Lungs.

**Aspiration Hazard** No information available.

#### Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

**ATEmix (oral)**

13,000.00 mg/kg



**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Sulfur 7704-34-9		96h LC50: < 14 mg/L (Lepomis macrochirus) 96h LC50: > 180 mg/L (Oncorhynchus mykiss) 96h LC50: = 866 mg/L (Brachydanio rerio)		
Iron oxide 1309-37-1		96h LC50: = 100000 mg/L (Danio rerio)		
Calcium oxide 1305-78-8		96h LC50: = 1070 mg/L (Cyprinus carpio)		

**Persistence and Degradability**

No information available.

**Bioaccumulation**

No information available

**Other adverse effects**

No information available.

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal methods** Dispose of in accordance with federal, state and local regulations.

**Contaminated Packaging** Dispose of contents/containers in accordance with local regulations.

**14. TRANSPORT INFORMATION**

**DOT** NOT REGULATED  
**Proper Shipping Name** NON-REGULATED  
**Hazard Class** N/A

**TDG** NOT REGULATED

**MEX** NOT REGULATED

**ICAO** NOT REGULATED

**IATA** NOT REGULATED  
**Proper Shipping Name** NON REGULATED

**IMDG/IMO** NOT REGULATED

**RID** NOT REGULATED

**ADR** NOT REGULATED

**ADN** NOT REGULATED

**15. REGULATORY INFORMATION**

**International Inventories**

TSCA Complies  
 DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute Health Hazard No  
 Chronic Health Hazard No  
 Fire Hazard No  
 Sudden release of pressure hazard No  
 Reactive Hazard No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product may contain substances regulated by state right-to-know regulations.

Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Silicon carbide 409-21-2	X	X	X		X
Aluminum oxide 1344-28-1	X	X	X	X	
Sulfur 7704-34-9	X	X	X		
Limestone 1317-65-3	X	X	X		
Kaolin 1332-58-7	X	X	X		
Iron oxide 1309-37-1	X	X	X		
Calcium oxide 1305-78-8	X	X	X		

**International Regulations**

Canada  
**WHMIS Hazard Class**  
 Non-controlled

**16. OTHER INFORMATION**

<b>NFPA</b>	Health Hazards 1	Flammability 0	Instability 0	<b>Physical and Chemical Hazards -</b>
<b>HMIS</b>	Health Hazards 1*	Flammability 0	Physical Hazard 0	<b>Personal Protection</b>
				X

**Chronic Hazard Star Legend** \* = Chronic Health Hazard

**Prepared By** Product Stewardship  
 23 British American Blvd.  
 Latham, NY 12110  
 1-800-572-6501

**Issuing Date** 14-Oct-2019  
**Revision Date** 24-Oct-2019  
**Revision Note** No information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text



*The supplier identified below generated this SDS using the UL SDS template. UL did not test, certify, or approve the substance described in this SDS, and all information in this SDS was provided by the supplier or was reproduced from publically available regulatory data sources. UL makes no representations or warranties regarding the completeness or accuracy of the information in this SDS and disclaims all liability in connection with the use of this information or the substance described in this SDS. The layout, appearance and format of this SDS is © 2014 UL LLC. All rights reserved.*

**End of Safety Data Sheet**

# Abrasive Blades – Rubber Bonded

**DANGER**



**Hazard Statements**

May cause respiratory irritation

May cause cancer

**Precautionary Statements - Prevention**

Obtain special instructions before use

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

Use personal protective equipment as required

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

Buehler  
41 Waukegan Rd  
Lake Bluff, IL 60044  
847-295-6500

# Abrasive Blades – Rubber Bonded

**DANGER**



**Hazard Statements**

May cause respiratory irritation

May cause cancer

**Precautionary Statements - Prevention**

Obtain special instructions before use

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

Use personal protective equipment as required

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

Buehler  
41 Waukegan Rd  
Lake Bluff, IL 60044  
847-295-6500