

# Silica Grinding Beads

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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Version: 1.0

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture

Product name : Silica Grinding Beads

Product code : BAWG 800-200-01, BMBG 800-200-02, BLBG 800-200-03, BAWG 400-200-04, BMBG 400200-05, BLBG 400-200-06, BAWG 100-200-10, BLBG 100-200-11, BMBG 100-200-16, BAWG 4000-200-18

Synonyms : Silica Beads, Grinding Beads, Grinding Resin

#### 1.2. Recommended use and restrictions on use

Recommended use : Laboratory Purposes

Restrictions on use : None known

#### 1.3. Supplier

OPS Diagnostics  
291 Route 22 East Building 6  
Lebanon, NJ 08833  
T 908-253-3444 - F 908-575-1660 [info@bcti.com](mailto:info@bcti.com) - [www.opsdiagnostics.com](http://www.opsdiagnostics.com)

#### 1.4. Emergency telephone number

Emergency number : 908-253-3444

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Not classified

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

No labeling applicable

#### 2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : None.

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Silica, amorphous	(CAS-No.) 7631-86-9	72.5	Not classified
Sodium oxide (Na <sub>2</sub> O)	(CAS-No.) 1313-59-3	13	Skin Corr. 1B, H314
Calcium oxide	(CAS-No.) 1305-78-8	9.06	Skin Corr. 1A, H314
Magnesium oxide (MgO)	(CAS-No.) 1309-48-4	4.22	Not classified

Comments : In normal conditions of use, the components cannot be released because of the form in which the article or preparation is placed on the market Full text of hazard classes and H-statements : see section 16

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### SECTION 4: First-aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.

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#### 4.1. Description of first aid measures

First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
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#### 4.3. Immediate medical attention and special treatment, if necessary

Not applicable.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam.
Unsuitable extinguishing media	: Not determined.

#### 5.2. Specific hazards arising from the chemical

No additional information available

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Exercise caution when fighting any chemical fire.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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##### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: In case of large spillages: Shovel or sweep up and put in a closed container for disposal. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in a well-ventilated place. Keep cool.
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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<b>Silica Grinding Beads</b>	
No additional information available	
<b>Silica, amorphous (7631-86-9)</b>	
<b>USA - OSHA - Occupational Exposure Limits</b>	
OSHA PEL (TWA) (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (vacated)
<b>Sodium oxide (Na<sub>2</sub>O) (1313-59-3)</b>	
No additional information available	
<b>Calcium oxide (1305-78-8)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Calcium oxide
ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Remark (ACGIH)	URT irr
<b>USA - OSHA - Occupational Exposure Limits</b>	
Local name	Calcium oxide
OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
<b>Magnesium oxide (MgO) (1309-48-4)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Magnesium oxide
ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (inhalable particulate matter)
ACGIH chemical category	Not Classifiable as a Human Carcinogen
<b>USA - OSHA - Occupational Exposure Limits</b>	
OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (fume, total particulate)

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

##### Hand protection:

Protective gloves

##### Eye protection:

Safety glasses

##### Skin and body protection:

Wear suitable protective clothing

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Solid

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Appearance	: Solid.
Color	: White
Odor	: Odorless
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 3.71 - 3.8
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

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### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

Not determined.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. On combustion, forms: carbon oxides (CO and CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

#### Silica, amorphous (7631-86-9)

LD50 oral rat	7900 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 2.2 mg/l (Exposure time: 1 h)
ATE US (oral)	7900 mg/kg body weight

#### Calcium oxide (1305-78-8)

LD50 oral rat	> 2000 mg/kg
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#### Magnesium oxide (MgO) (1309-48-4)

LD50 oral rat	3870 mg/kg
ATE US (oral)	3870 mg/kg body weight

Skin corrosion/irritation	:	Not classified.
Serious eye damage/irritation	:	Not classified.
Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified

#### Silica, amorphous (7631-86-9)

IARC group	3 - Not classifiable
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Reproductive toxicity	:	Not classified
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STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified

Aspiration hazard	:	Not classified
Viscosity, kinematic	:	No data available
Symptoms/effects	:	Not expected to present a significant hazard under anticipated conditions of normal use.

## SECTION 12: Ecological information

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### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Silica, amorphous (7631-86-9)	
LC50 fish 1	5000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 Daphnia 1	7600 mg/l (Exposure time: 48 h - Species: Ceriodaphnia dubia)
Calcium oxide (1305-78-8)	
LC50 fish 1	1070 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static])

### 12.2. Persistence and degradability

Silica Grinding Beads	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

Silica Grinding Beads	
Bioaccumulative potential	Not established.
Silica, amorphous (7631-86-9)	
BCF fish 1	(no bioaccumulation expected)

Calcium oxide (1305-78-8)	
BCF fish 1	(no bioaccumulation)

### 12.4. Mobility in soil

Silica Grinding Beads	
Ecology - soil	Not established.

### 12.5. Other adverse effects

Effect on global warming : Not established

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not regulated

### Transport by sea

Not regulated

### Air transport

Not regulated

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### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### Silica Grinding Beads

SARA Section 311/312 Hazard Classes	None
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All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

#### 15.2. International regulations

##### CANADA

##### Silica, amorphous (7631-86-9)

Listed on the Canadian DSL (Domestic Substances List)

##### Sodium oxide (Na<sub>2</sub>O) (1313-59-3)

Listed on the Canadian DSL (Domestic Substances List)

##### Calcium oxide (1305-78-8)

Listed on the Canadian DSL (Domestic Substances List)

##### Magnesium oxide (MgO) (1309-48-4)

Listed on the Canadian DSL (Domestic Substances List)

##### EU-Regulations

##### Silica, amorphous (7631-86-9)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

##### Sodium oxide (Na<sub>2</sub>O) (1313-59-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

##### Calcium oxide (1305-78-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

##### Magnesium oxide (MgO) (1309-48-4)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

##### National regulations

##### Silica, amorphous (7631-86-9)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on the Japanese ISHL (Industrial Safety and Health Law)  
Listed on the Korean ECL (Existing Chemicals List)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)  
Listed on CICR (Turkish Inventory and Control of Chemicals)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)

##### Sodium oxide (Na<sub>2</sub>O) (1313-59-3)

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Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
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Listed on CICR (Turkish Inventory and Control of Chemicals)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)

### Calcium oxide (1305-78-8)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
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Listed on the TCSI (Taiwan Chemical Substance Inventory)

### Magnesium oxide (MgO) (1309-48-4)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on the Japanese ISHL (Industrial Safety and Health Law)  
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Listed on CICR (Turkish Inventory and Control of Chemicals)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)

## 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Silica, amorphous(7631-86-9)	U.S. - Massachusetts - Right To Know List; U.S. - Pennsylvania - RTK (Right to Know) List
Calcium oxide(1305-78-8)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
Magnesium oxide (MgO)(1309-48-4)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: Other information

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Revision date : 01/08/2020  
Other information : **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H-phrases:



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Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
H314	Causes severe skin burns and eye damage

SDS US (GHS HazCom 2012)

*DISCLAIMER OF LIABILITY* The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable