

# Material Safety Data Sheet

## Product: *Bioni G50.1 (Dry Component)*

Date of Publication: January 1<sup>st</sup> 2010

Page: 1/7

MSDS-No.: BICC-US-2010-5-3

### 1. Product and Company Identification

**Product Name:**

Bioni G50.1

**Manufacturer:**

Bioni CS GmbH  
Lessingstr. 21  
D-46149 Oberhausen  
Germany

Telephone: +49 208 6217553  
Fax: +49 208 6217555

**Distributor:**

Bioni USA and Americas LLC  
2236 72nd Ave East  
Sarasota, FL 34243  
USA

Telephone: (941) 926-5881  
Fax: (941) 296-7423

**Emergency Telephone Numbers:**

Giftnotruf Berlin (24 hours / support in German and English)  
Telephone: +49 030 30686790

### 2. Composition / Information on Ingredients

**Chemical Nature of the preparation:**

Mixture of Calcium Aluminates, Titanium Dioxide, Silica Flour and Fillers

**Hazardous Components:**

Ingredient	CAS No.	Weight %	Occupational Exposure Limits		
			OSHA PEL	NIOSH REL	ACGIH TLV
Chrystal-line Silica (Quartz)	14808-60-7	< 50%	0.01 mg/m <sup>3</sup>		0.05 mg/m <sup>3</sup>
Alumina Cement	65997-16-2	< 50%	10 mg/m <sup>3</sup> **		10 mg/m <sup>3</sup> *
Titanium Dioxide	13463-67-7	< 20%	15 mg/m <sup>3</sup> **		10 mg/m <sup>3</sup> *

\*: as Dust    \*\*: Total Dust

OSHA: Occupational Safety and Health Administration (US Dept. of Labour)

NIOSH: National Institute for Occupational Safety and Health

ACGHI: American Conference of Governmental Industrial Hygienists

PEL: Permissable Exposure Limit

REL: Recommended Exposure Limit

TLV: Threshold Limit Value

### 3. Hazards Identification

**Routes of Exposure**

INHALATION of vapor or spray mist.

EYE and Skin contact with the products, vapor or spray mist.

# Material Safety Data Sheet

**Product: *Bioni G50.1 (Dry Component)***

Date of Publication: January 1<sup>st</sup> 2010

Page: 2/7

MSDS-No.: BICC-US-2010-5-3

### 3. Hazards Identification (cont'd)

#### ***Effects of Exposure***

##### **EYES:**

Contact with dust may cause burns and/or mechanical irritation.

##### **SKIN:**

May cause severe irritation, redness, and possible burns. Continued and prolonged contact may result in drying of the skin. Contact with dust may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

##### **INHALATION:**

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposures may result in lung disease (silicosis and/or lung cancer). (See Section 11 - Toxicological Information)

##### **INGESTION:**

Although ingestion is not considered a significant route of exposure, this material may cause gastrointestinal irritation if ingested.

##### **CHRONIC CARCINOGENICITY EFFECTS:**

Contains Silica Quartz. Crystalline silica has been classified by IARC as a known human carcinogen. Chronic overexposure can cause silicosis, a form of lung scarring that can cause shortness of breath, reduced lung function, and in severe cases, death.

### 4. First Aid Measures

#### ***General Information***

In all cases of doubt, or when symptoms persist, seek medical advice and show this Safety Data Sheet.

#### ***Inhalation***

Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

#### ***Skin***

Wash skin with soap and plenty of water. Get medical attention if symptoms occur.

#### ***Eyes***

Flush eyes with large amounts of water for 15 minutes. Get medical attention.

#### ***Ingestion***

If swallowed, seek medical advice immediately. Do not induce vomiting.

### 5. Fire Fighting Measures

#### ***Flash Point***

No Data

# Material Safety Data Sheet

Product: *Bioni G50.1 (Dry Component)*

Date of Publication: January 1<sup>st</sup> 2010

Page: 3/7

MSDS-No.: BICC-US-2010-5-3

## 5. Fire Fighting Measures (cont'd)

### *Suitable extinguishing media*

As appropriate for surrounding fire.

### *Protection of Firefighters*

Wear positive-pressure self-contained breathing apparatus and protective fire fighting clothing.

## 6. Accidental Release Measures

### *Personal Precautions*

Wear adequate personal protective equipment (see section 8).

### *Environmental Precautions*

Do not allow to enter drains or watercourses.

If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

### *Methods of Cleaning Up*

Dampen material with water to control dusting. Scoop up and transfer to appropriate container for disposal according to local / national regulations (see section 13). Flush spill area with water.

## 7. Handling and Storage

### *Handling*

Avoid dust formation. Avoid contact with eyes, skin and clothing. For personal protection see Section 8.

### *Storage*

Keep container tightly closed when not in use. Store in cool, frost-free, dry and well-ventilated place away from sources of heat and combustible materials. Keep out of reach of children.

### *Hygiene Practices*

Wash thoroughly after handling. Avoid contact with eyes and skin.

## 8. Exposure Controls / Personal Protection

### *Occupational Exposure Limits*

Crystalline Silica (Quartz): 0.1 mg/m<sup>3</sup>(OSHA PEL), 0.05 mg/m<sup>3</sup> (ACGIH TLV)

Alumina Cement: 10 mg/m<sup>3</sup>(OSHA PEL), 10 mg/m<sup>3</sup>(ACGIH TLV)

Titanium Dioxide: 15 mg/m<sup>3</sup> (OSHA PEL), 10 mg/m<sup>3</sup> (ACGIH TLV)

### *Engineering controls and hygienic practices*

Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use local exhaust when the general ventilation is inadequate.

Avoid contact with skin and eyes.

Remove contaminated clothing.

When using do not eat, drink and smoke.

Wash hands after using.

Handle in accordance with good industrial hygiene and safety practice.

# Material Safety Data Sheet

Product: *Bioni G50.1 (Dry Component)*

Date of Publication: January 1<sup>st</sup> 2010

Page: 4/7

MSDS-No.: BICC-US-2010-5-3

## 8. Exposure Controls / Personal Protection (cont'd)

### **Personal protective Equipment:**

#### **Respiratory System**

Not required in case of sufficient ventilation. In poorly ventilated areas or if the PEL/TLV is exceeded a NIOSH approved particulate respirator is recommended. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

#### **Hand Protection**

Use chemical resistant gloves.

#### **Eye Protection**

If there is a risk of eye contact wear safety spectacles with unperforated sideshields.

#### **Skin and Body Protection**

Use protective clothing.

## 9. Physical and Chemical Properties

Form:	powder
Colour:	grey
Odour:	none
Flash Point:	no data
Specific Gravity at 20°C:	1.7 g/cm <sup>3</sup>
Bulk density:	1100-1300 kg/m <sup>3</sup>
pH:	11.5 - 12
VOC content:	0 g/l

## 10. Stability and Reactivity

### **Chemical Stability**

Stable in closed containers and under normal conditions of use.

### **Conditions to Avoid**

Heat, flames, incompatible materials and freezing temperatures below 0°C (32 °F).

### **Materials to avoid**

Stable under recommended storage and handling conditions (see section 7).

### **Hazardous Decomposition Products**

None known under normal conditions of storage and use.

## 11. Toxicological Information

Rats exposed to *Titanium Dioxide* dust at 250 mg/m<sup>3</sup> developed lung cancer. Such exposure levels are not attainable in the workplace. If the product is handled in accordance with this Safety Data Sheet and the product label no adverse health effects are expected. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

# Material Safety Data Sheet

**Product: *Bioni G50.1 (Dry Component)***

Date of Publication: January 1<sup>st</sup> 2010

Page: 5/7

MSDS-No.: BICC-US-2010-5-3

## 11. Toxicological Information (cont'd)

### ***Skin Contact***

Contact with skin may result in irritation.

### ***Eye Contact***

May be an eye irritant.

### ***Inhalation***

No adverse effects expected.

### ***Ingestion***

No adverse effects expected.

### ***Toxicological Data***

Chronic exposure to crystalline silica in the respirable size has been shown to cause silicosis, a debilitating lung disease. In addition, the International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen.

LD50 (Oral): 1,300 mg/kg

## 12. Ecological Information

Do not allow to enter drains or watercourses.

## 13. Disposal Considerations

### ***Product***

Recommendation:

Handle disposal of waste material in manner which complies to local, state, province and federal laws and regulations.

### ***Packaging***

Recommendation:

Dispose according to local regulations.

## 14. Transport Information

DOT Hazard Classification: No

IMO/IMDG (Sea) and IATA/ICAO (Air): NON-DANGEROUS GOOD

## 15. Regulatory Information

### **TSCA (Toxic Substances Control Act) Certification**

#### ***TSCA Inventory:***

All chemicals in this products are listed, or are exempt from listing, on the TSCA INVENTORY.

# Material Safety Data Sheet

**Product: *Bioni G50.1 (Dry Component)***

Date of Publication: January 1<sup>st</sup> 2010

Page: 6/7

MSDS-No.: BICC-US-2010-5-3

## 15. Regulatory Information (cont'd)

### **SARA (Superfund Amendments and Reauthorization Act of 1986)**

#### ***TITLE III Section 302***

#### ***Extremely Hazardous Substances (EHSs) / 40 CFR Part 355:***

There are no components present in this product at a level which could require reporting under the statute.

### **CERCLA (Comprehensive Environmental Response Compensation and Liability Act of 1980)**

#### ***Hazardous Substances / 40 CFR Part 302.4:***

There are no components present in this product at a level which could require reporting under the statute.

### **EPCRA (Emergency Planning and Community Right-to-Know Act) Section 313**

#### ***Toxic Chemical Release / 40 CFR Part 372:***

There are no components present in this product at a level which could require reporting under the statute.

### **EPCRA (Emergency Planning and Community Right-to-Know Act) Section 311/312**

#### ***Hazardous Chemical Storage Reporting Requirements / 40 CFR Part 370:***

Hazard Category Compensation For Reporting Under Sections 311 and 312 (for this product):

Fire Hazard:	No
Sudden Release of Pressure:	No
Reactive:	No
Immediate (Acute) Health Hazards:	No
Delayed (Chronic) Health Hazard:	No

### **OSHA (Occupational Safety and Health Standard)**

#### ***Toxic and Hazardous Substances/ 29 CFR Part 1910 Subpart Z:***

Dust and potential respirable crystalline silica generated during product use may be hazardous.

### **CLEAN WATER ACT**

There are no components present in this product listed.

### **CLEAN AIR ACT - CAA Section 112(r)**

#### ***Toxic and Flammable Substances / 40 CFR 68.130***

There are no components present in this product listed.

### **STATE-RIGHT-TO-KNOW:**

#### **California Proposition 65**

This product contains Crystalline Silica (Quartz)(CAS 14808-60-7). Respirable crystalline silica is known to the state of California to cause cancer, birth defects or other reproductive harm.

# Material Safety Data Sheet

**Product: *Bioni G50.1 (Dry Component)***

Date of Publication: January 1<sup>st</sup> 2010

Page: 7/7

MSDS-No.: BICC-US-2010-5-3

## 15. Regulatory Information (cont'd)

### **Massachusetts Right to Know Substance List (MSL) (105 CMR Section 670.000)**

Following Chemicals in this product are listed:

Chrystalline Silica (Quartz)(CAS 14808-60-7): Hazardous Substance

### **Pennsylvania Right to Know Hazardous Substance List**

Following Chemicals in this product are listed:

Chrystalline Silica (Quartz)(CAS 14808-60-7): Workplace Hazard

### **California SCAQMD (South Coast Air Quality Management District)**

#### **Rule 443.1: VOC's (Volatilic Organic Compounds)**

This product contains < 1% by weight VOC.

### **CANADA**

#### **DSL (Domestic Substances List)**

All chemicals in this products are listed on the DSL.

#### **WHMIS (Workplace Hazardous Materials Information System)**

##### **Ingredient Disclosure List**

Following Chemicals in this product are listed:

Chrystalline Silica (Quartz)(CAS 14808-60-7): WHMIS Classification D2A

## 16. Other Information

The information in this MSDS was obtained from sources which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED, REGARDING ITS CORRECTNESS.

The conditions or methods of handling, storage, use and 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 MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.