

Material Safety Data Sheet

Product: *Bioni G25.1 (Dry Component)*

Date of Publication: January 1st 2010

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MSDS-No.: BID-US-2010-5-1

1. Product and Company Identification

Product Name:

Bioni G25.1 (Dry Component)

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 58 81
Fax: (941) 296 74 23

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 ³ | | 0.05 mg/m ³ |
| Alumina Cement | 65997-16-2 | < 50% | 10 mg/m ³ ** | | 10 mg/m ³ * |
| Titanium Dioxide | 13463-67-7 | < 20% | 15 mg/m ³ ** | | 10 mg/m ³ * |

*: as Dust **: Total Dust

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

NIOSH: National Institute for Occupational Safety and Health

ACGIH: American Conference of Governmental Industrial Hygienists

PEL: Permissible 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.

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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

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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/m³(OSHA PEL), 0.05 mg/m³ (ACGIH TLV)

Alumina Cement: 10 mg/m³(OSHA PEL), 10 mg/m³(ACGIH TLV)

Titanium Dioxide: 15 mg/m³ (OSHA PEL), 10 mg/m³ (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.

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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 ³ |
| Bulk density: | 1100-1300 kg/m ³ |
| 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/m³ 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:

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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.

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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.

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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.

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