This SDS packet was issued with item:
070352302

N/A
1. Product identification/preparation/company undertaking

<table>
<thead>
<tr>
<th>Trade name:</th>
<th>Patterson MTA Cement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of the preparation</td>
<td>Patterson Companies, Inc. 1031</td>
</tr>
<tr>
<td>Manufacturer/supplier:</td>
<td>Mendota Heights Road St.Paul,</td>
</tr>
<tr>
<td></td>
<td>MN 55120</td>
</tr>
<tr>
<td>Emergency information:</td>
<td>(800) 424-9300</td>
</tr>
</tbody>
</table>

2. Hazards identification

<table>
<thead>
<tr>
<th>Risk identification:</th>
<th>Special risks for human beings and environment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification:</td>
<td>Classification corresponds to actual EC guidelines, however completed with details from technical literature and company data.</td>
</tr>
</tbody>
</table>

3. Composition/Information on Ingredients

| Chemical characterization: | Mixture of several mineral oxides and bismuth oxide |
| Description:               | None                                                |

<table>
<thead>
<tr>
<th>CAS-No.:</th>
<th>Name</th>
<th>R-classification</th>
</tr>
</thead>
</table>

4. First-aid measures

| General information: | Wash with plenty of water and soap |
| after skin contact:  |                                |
| after eye contact:   | Rinse opened eye for several minutes under running water |
| after swallowing:    | If symptoms persist consult medical advice |

5. Fire fighting measures

| Extinguishing media: | CO₂, powder, water spray. |
|                     | Use extinguishing method and media suitable to surrounding fire |
| Protective equipment: |                        |
6. Accidental release measures

Personal precautions:  
Environmental precautions: Do not allow to enter drains/surface water/ground-water.
Methods for cleaning up: Take up mechanically. Clean up affected area.

7. Handling and storage

Handling: This product should only be supplied or handled to dentists or dental technicians or upon their instructions.

Handling procedures:

Recommendation for fire and explosion protection:
storage: Store at dry place, at 10 – 25°C. Do not store below 10°C. Store away from food stuffs.

Requirements at storerooms and containers:
Requirements for storage with other products:
Additional storage conditions:

Storage classification:

8. Exposure controls/personal protection

Additional information for technical plants:

Components with limits of values to be supervised at the workplace:

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Name</th>
<th>art</th>
<th>value</th>
<th>unit</th>
</tr>
</thead>
</table>

The product contains no relevant quantities of components with limits of values to be supervised at the workplace.

Additional information

Personal protective equipment: Not necessary
General measures of protection and hygiene:
Respiration: Required, when aerosols are generated
Hands: Gloves required
Eyes: Safety glasses
Material Safety Data Sheet

Date of issue: 27.06.2011 Version: 1
Printing date: 28.03.2013

9. Physical and chemical properties

Appearance
Form: solid
Colour: white
Odour: odourless

Information on change in the physical state
Melting point/melting range: n.a.
Boiling point/boiling range: n.a.
Flash point: n.a.
Autoignation temperature: n.a. (non combustible)
Danger of explosion: none
Density: n.a.
Vapour pressure: n.a. (non volatile)
Viscosity: n.a. (powder)
pH:
Solubility in/miscibility with:
Water:
Content of solvents: none
Organic solvents: none
Water:
Content of solids:

10. Stability and reactivity
No decomposition if used according to specifications.

Incompatibility with other substances:
No dangerous reactions known.

Hazardous decomposition products:
No dangerous decomposition products known.

11. Toxicological information

Acute toxicity:
Primary irritation:
skin: May cause skin irritation.
eye: Irritating effect.

Sensitization of product:
not observed

Additional toxicological information:
During the use as endodontic repair material no health diseases are reported.
### 12. Ecological information

**General information:** Do not flush into surface water or sanitary sewer system

**Classification of water endangerment:** WGK 1 (slightly hazardous for water)

### 13. Disposal considerations

**Product:**

**Recommendation:** Use proper landfill disposal or incineration in accordance with local, state and federal regulations

**Disposal key number:**

**Uncleaned packaging:**

**Recommendation:**

### 14. Transport information

**Land transport ADR/RID and GGVS/GGVE (Germany):** Not classified as dangerous goods in the meaning of transport regulations

**Sea transport IMDG**

**Air transport ICAO-TI and IATA-DGR**

### 15. Regulatory information

**Classification according to EC-guidelines:** The product does not have to be labeled due to calculation procedure for the "General Classification guideline for preparations of the EU" in the latest version.

**National Prescriptions:**

### 16. Other information:

**Changes compared with the previous version:**

The above information is based on our present day knowledge and relates solely to the safety requirements of the product. The data do not signify any warranty with regards to products properties. However users of the product should satisfy themselves that the information given is sufficient and correct for their specific circumstances of use.

**Preparation by:**

Global Safety Management
SECTION 1: Identification

Product identifier
  Product name: Patterson MTA Cement
  Product code: 070352302

Recommended use of the product and restriction on use
  Relevant identified uses: Dental Cement
  Uses advised against: Not determined or not applicable.
  Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details
  Manufacturer: Patterson Companies, Inc.
  Supplier
  1031 Mendota Heights Road
  St. Paul, MN 55120
  1-800-328-5536 Fax:1-651-686-9331

Emergency telephone number:
  United States
  CHEMTREC
  Within USA and Canada: 1-800-424-9300 (CHEMTREC, 24 hours)
  Outside USA and Canada: +1-703-527-3887 (CHEMTREC, 24 hours)

SECTION 2: Hazard(s) identification

GHS classification: Not a hazardous substance or mixture

Label elements
  Hazard pictograms: None
  Signal word: None
  Hazard statements: None
  Precautionary statements: None
  Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Identification</th>
<th>Name</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number:</td>
<td>Proprietary Mixture of several mineral oxides</td>
<td>&lt;100</td>
</tr>
<tr>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAS number:</td>
<td>Bismuth(III) oxide</td>
<td>&lt;100</td>
</tr>
<tr>
<td>1304-76-3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional Information: None
SECTION 4: First aid measures

Description of first aid measures

General notes:
Not determined or not applicable.

After inhalation:
Loosen clothing as necessary and position individual in a comfortable position
Maintain an unobstructed airway
Get medical advice/attention if you feel unwell

After skin contact:
Rinse affected area with soap and water
If symptoms develop or persist, seek medical attention

After eye contact:
Rinse/flush exposed eye(s) gently using water for 15-20 minutes
If symptoms develop or persist, seek medical attention

After swallowing:
Rinse mouth thoroughly
Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:
Not determined or not applicable.

Delayed symptoms and effects:
Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:
Not determined or not applicable.

Notes for the doctor:
Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:
Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:
Not determined or not applicable.

Specific hazards during fire-fighting:
Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:
Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:
Carbon monoxide and carbon dioxide may form upon combustion
Heating causes a rise in pressure, risk of bursting and combustion

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:
Ensure adequate ventilation
Ensure air handling systems are operational
Wear protective eye wear, gloves and clothing

Environmental precautions:
Should not be released into the environment
Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:
Wear protective eye wear, gloves and clothing
Sweep or scoop up solid material while minimizing dust generation
Dispose of contents / container in accordance with local regulations

Reference to other sections:
Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:
Use only with adequate ventilation.
Avoid breathing dust.
Do not eat, drink, smoke or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:
Keep container tightly sealed.
Keep container dry.
Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:
No occupational exposure limits noted for the ingredient(s).

Biological limit values:
No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:
Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.
Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Personal protection equipment
Eye and face protection:
Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:
Select glove material impermeable and resistant to the substance.
Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection:
If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygienic measures:
Avoid contact with skin, eyes and clothing.
Wash hands before breaks and at the end of work.
Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
</tr>
<tr>
<td>Odor</td>
</tr>
<tr>
<td>Odor threshold</td>
</tr>
<tr>
<td>pH</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
</tr>
<tr>
<td>Initial boiling point/range</td>
</tr>
<tr>
<td>Flash point (closed cup)</td>
</tr>
<tr>
<td>Evaporation rate</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
</tr>
<tr>
<td>Upper flammability/explosive limit</td>
</tr>
<tr>
<td>Lower flammability/explosive limit</td>
</tr>
<tr>
<td>Vapor pressure</td>
</tr>
<tr>
<td>Vapor density</td>
</tr>
<tr>
<td>Density</td>
</tr>
<tr>
<td>Relative density</td>
</tr>
<tr>
<td>Solubilities</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
</tr>
<tr>
<td>Auto/Self-ignition temperature</td>
</tr>
<tr>
<td>Decomposition temperature</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
</tr>
<tr>
<td>Explosive properties</td>
</tr>
<tr>
<td>Oxidizing properties</td>
</tr>
</tbody>
</table>

Other information

SECTION 10: Stability and reactivity

Reactivity:
Does not react under normal conditions of use and storage.

Chemical stability:
Stable under normal conditions of use and storage.

Possibility of hazardous reactions:
None under normal conditions of use and storage.

Conditions to avoid:
None known.

Incompatible materials:
None known.

Hazardous decomposition products:
None known.

SECTION 11: Toxicological information

Acute toxicity
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Skin corrosion/irritation
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Serious eye damage/irritation
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Respiratory or skin sensitization
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Carcinogenicity
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.
International Agency for Research on Cancer (IARC): None of the ingredients are listed.
National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Reproductive toxicity
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Specific target organ toxicity (single exposure)
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Specific target organ toxicity (repeated exposure)
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Patterson MTA Cement

**Substance data:** No data available.

**Aspiration toxicity**
- **Assessment:** Based on available data, the classification criteria are not met.
- **Product data:** No data available.
- **Substance data:** No data available.

**Information on likely routes of exposure:**
No data available.

**Symptoms related to the physical, chemical and toxicological characteristics:**
No data available.

**Other information:**
No data available.

### SECTION 12: Ecological information

**Acute (short-term) toxicity**
- **Assessment:** Based on available data, the classification criteria are not met.
- **Product data:** No data available.
- **Substance data:** No data available.

**Chronic (long-term) toxicity**
- **Product data:** No data available.
- **Substance data:** No data available.

**Persistence and degradability**
- **Product data:** No data available.
- **Substance data:** No data available.

**Bioaccumulative potential**
- **Product data:** No data available.
- **Substance data:** No data available.

**Mobility in soil**
- **Product data:** No data available.
- **Substance data:** No data available.

**Other adverse effects:** No data available.

### SECTION 13: Disposal considerations

**Disposal methods:**
It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities.

### SECTION 14: Transport information

**United States Transportation of dangerous goods (49 CFR DOT)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>Not regulated</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Not regulated</td>
</tr>
<tr>
<td>UN transport hazard class(es)</td>
<td>None</td>
</tr>
<tr>
<td>Packing group</td>
<td>None</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>None</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>None</td>
</tr>
</tbody>
</table>

**International Maritime Dangerous Goods (IMDG)**
### Safety Data Sheet

**Initial preparation date:** 11.28.2017

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### Patterson MTA Cement

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
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<td>Special precautions for user</td>
<td>None</td>
</tr>
</tbody>
</table>

### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

<table>
<thead>
<tr>
<th>Field</th>
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<tbody>
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</tr>
</tbody>
</table>

---

### SECTION 15: Regulatory information

#### United States regulations

**Inventory listing (TSCA):**

<table>
<thead>
<tr>
<th>UN number</th>
<th>Substance</th>
<th>Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1304-76-3</td>
<td>Bismuth(III) oxide</td>
<td>Listed</td>
</tr>
</tbody>
</table>

**Significant New Use Rule (TSCA Section 5):** Not determined.

**Export notification under TSCA Section 12(b):** Not determined.

**SARA Section 302 extremely hazardous substances:** Not determined.

**SARA Section 313 toxic chemicals:**

<table>
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</thead>
<tbody>
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<td>Bismuth(III) oxide</td>
<td>Listed</td>
</tr>
</tbody>
</table>

**CERCLA:** Not determined.

**RCRA:** Not determined.

**Section 112(r) of the Clean Air Act (CAA):** Not determined.

**Massachusetts Right to Know:**

<table>
<thead>
<tr>
<th>UN number</th>
<th>Substance</th>
<th>Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1304-76-3</td>
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<td>Not</td>
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</table>

**New Jersey Right to Know:**

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**New York Right to Know:**

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</table>

**Pennsylvania Right to Know:**

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<th>Substance</th>
<th>Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1304-76-3</td>
<td>Bismuth(III) oxide</td>
<td>Not</td>
</tr>
</tbody>
</table>

**California Proposition 65:** None of the ingredients are listed.

---

### SECTION 16: Other information

**Abbreviations and Acronyms:** None
Disclaimer:
This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 1-0-0-0
HMIS: 1-0-0-0
Initial preparation date: 11.28.2017

End of Safety Data Sheet