### Section 1- PRODUCT IDENTIFICATION

<table>
<thead>
<tr>
<th>COMPOSITION</th>
<th>PRODUCT NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bi4TiO3</td>
<td>Bismuth Titanate</td>
</tr>
</tbody>
</table>

### Section 2- HAZARDOUS INGREDIENTS

Note: Products under normal conditions do not represent an inhalation, ingestion or contact health hazard.

<table>
<thead>
<tr>
<th>MATERIAL OR COMPONENT</th>
<th>CAS NUMBER</th>
<th>WT%</th>
<th>EXPOSURE LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bismuth Titanate</td>
<td>12010-77-4</td>
<td>305</td>
<td>Not Set</td>
</tr>
</tbody>
</table>

### Section 3- PHYSICAL DATA

<table>
<thead>
<tr>
<th>MATERIAL IS (AT NORMAL CONDITIONS)</th>
<th>APPERANCE AND ODOR</th>
<th>MELTING POINT (BASE METAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Liquid □ Solid □ Gas □ Other</td>
<td>Light yellow powder, pieces or pressed parts</td>
<td>271.3°C</td>
</tr>
</tbody>
</table>

### Section 4- FIRE AND EXPLOSION

<table>
<thead>
<tr>
<th>Flash Point (Method Used)</th>
<th>Flammable Limits</th>
<th>LEL</th>
<th>UEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>Non flammable</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

EXTINGUISHING MEDIA

Non flammable

SPECIAL FIRED FIGHTING PROCEDURES

None

UNUSUAL FIRE AND EXPLOSION HAZARDS

None

### Section 5- REACTIVITY DATA

<table>
<thead>
<tr>
<th>STABILITY</th>
<th>INCOMPATABILITY (MATERIALS TO AVOID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sable</td>
<td>Acids or acid fumes</td>
</tr>
</tbody>
</table>

CONDITIONS TO AVOID

None

HAZARDOUS DECOMPOISITION PRODUCTS

Toxic fumes when mixed with acids
**Section 6 - HEALTH HAZARD GUIDE**

**MAJOR EXPOSURE HAZARD**

- □ Inhalation  □ Skin  □ Skin Absorption  □ Eye Contact  □ Ingestion

**EFFECTS OF OVEREXPOSURE**

No data is available on the effects of inhalation of this compound. In general, insoluble bismuth and titanate compounds are known for mild respiratory tract irritation. No data on long term effects. Dermal/eye contact: May be a mild irritant to both skin and eyes.

In Soluble bismuth and titanate compounds are considered to be low in toxicity. But repeated excessive exposure via inhalation or ingestion may cause “Bismuth Line”, a blue-black discoloration of the guns as well as a foul odor to the breath.

**EMERGENCY & FIRST AID PROCEDURES**

- **INHALATION:** Remove from exposed area to fresh air.
- **INGESTION:** If conscious give 1-2 glasses fluids and induce vomiting. Never give anything by mouth or induce vomiting to an unconscious victim.
- **SKIN CONTACT:** Brush material off skin. Wash affected area with soap or mild detergent and large amounts of water.
- **EYE CONTACT:** Flush eyes with lukewarm water lifting up the upper and lower lids for at least fifteen minutes. If irritation persists, contact a physician.

**Section 7 - SPILL OR LEAK PROCEDURES**

**SPILL OR LEAK PROCEDURES**

- Scoop up and vacuum, avoid raising dust.

**WASTE DISPOSAL METHODS**

- Dispose of normal refuse.

**Section 8 - SPECIAL PROTECTION**

**RESPIRATORY**
- Approved respirator for dusts and mists

**VENTILATION**
- Local exhaust: Recommended. Mechanical exhaust: Not recommended.

**EYE PROTECTION & PROTECTIVE CLOTHING**
- Safety glasses, any gloves to limit skin contact (normal work wear).

**Section 9 - SPECIAL PRECAUTIONS**

**WORK/HYGIENIC/MAINTENANCE PRACTICES**

- None

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