# MATERIAL SAFETY DATA SHEET

## SECTION 1 - IDENTIFICATION

**Manufacturer's Name:** TAM CERAMICS, INCORPORATED  
**Address:** BOX C, BRIDGE STATION  
**City, State, Zip:** NIAGARA FALLS, NY, 14305  
**Product Class:** Ceramic Opacifier  
**Trade Name:** Zircopax  
**Chemical Code:** 51417  
**Emergency Telephone:** 718/278-9400

## SECTION 2 - HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>CAS #</th>
<th>PERCENT BY WEIGHT</th>
<th>OSHA PEL TWA</th>
<th>ACGIH TLV</th>
<th>LEL %</th>
<th>VAPOR PRESSURE mm Hg @ 68°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zirconium Silicate</td>
<td>14940-68-2</td>
<td>95</td>
<td>5 mg/m³</td>
<td>5 mg/m³</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Respirable Quartz</td>
<td>14808-60-7</td>
<td>5</td>
<td>(1)</td>
<td>(1)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

(1) As measured by NIOSH regulations on Crystalline Silica - see handbook of Toxic & Hazardous Chemicals.

## SECTION 3 - PHYSICAL DATA

**Boiling Range:** N/A  
**Vapor Density:** N/A  
**Evaporation Rate:** N/A  
**% Volatile by Volume:** N/A  
**Weight Per Gallon:** N/A  
**Specific Gravity:** 4.5

## SECTION 4 - FIREFIGHTING DATA

**DOT Category:** Not Regulated  
**Flash Point:** N/A  
**LEL:** N/A  
**Extinguishing Media:**  
- ✗ WATER-FOG  
- ✗ FOAM  
- ✗ CARBON DIOXIDE  
- ✗ DRY CHEMICAL

**Unusual Fire and Explosion Hazards:** None

**Special Fire Fighting Procedures:** None

## SECTION 5 - REACTIVITY DATA

**Stability:** ✗ STABLE  
**Conditions to Avoid:** None  
**Incompatibility (Materials to Avoid):** None  
**Hazardous Decomposition Products:** None  
**Hazardous Polymerization:** ✗ WILL NOT OCCUR  
**Conditions to Avoid:** None
SECTION VII - HEALTH HAZARD DATA

Ingestion, Inhalation and contact

CARCINOGENICITY

IARC has classified crystalline Silica as a probably carcinogenic for humans.

EFFECTS OF OVEREXPOSURE
Possible lung irritation from Crystalline Silica. Long term exposure to crystalline silica can cause pneumococcosis. Symptoms include coughing, wheezing, dyspnea, and impaired pulmonary functions.

Chronic health effects: Crystalline Silica has been classified by IARC as a probably carcinogenic for humans. Crystalline Silica is also a known cause of Silicosis, a non cancerous lung disease caused by excessive exposure to Crystalline Silica.

EMERGENCY AND FIRST AID PROCEDURES

EYES: Normal washing to remove dust
SKIN: Normal washing to remove dust
INHALATION: Remove to fresh air
INGESTION: Call a physician

SECTION VII -- SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Normal precautions for nuisance dust should be observed. Avoid prolonged inhalation of dust.

WASTE DISPOSAL METHOD

Dispose of in accordance with Local, State and federal regulations.

SECTION VIII -- SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION

Where TLV is exceeded, use of an approved dust respirator is recommended.

VENTILATION

Provide as required to keep TLV below acceptable limits.

PROTECTIVE GLOVES None
EYE PROTECTION Normal protection against foreign substances as needed - safety glasses.
OTHER PROTECTION EQUIPMENT None

SECTION IX -- SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Normal precautions for "nuisance dust" should be provided.

OTHER PRECAUTIONS

None

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