**SECTION 1: Identification of the substance/mixture and of the company**

Product Names: 1810, 1820, 1830, 1840, 1850, 1860, 1870, 1880, 1890

Identified uses: For enameling

Synonyms: Frit, Lead Free Enamel

Supplier: Thompson Enamel

650 Colfax Avenue
Bellevue, Ky. 41073 U.S.A.
Phone: 859-291-3800
Fax: 859-291-1849
Email: info@thompsonenamel.com

**SECTION 2: Hazards identification**

Although these products may contain elements which have low TLV (threshold limit value) as soluble metal ions, this product has been formed at high temperatures and do not necessarily have any of the properties of their component oxides or metals.

**SECTION 3: Composition/Information on ingredients**

Frit, with CAS#65997-18-4 is a mixture of inorganic chemical substances produced by rapidly quenching a molten, complex combination of materials, confining the chemical substances thus manufactured as non-migratory components of glassy solid flakes or granules. These components may be present as part of the Frit:

<table>
<thead>
<tr>
<th>Cas #</th>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Silica</td>
<td>Proprietary</td>
</tr>
<tr>
<td>1303-96-4</td>
<td>Borax</td>
<td>Proprietary</td>
</tr>
<tr>
<td>554-13-2</td>
<td>Lithium Carbonate</td>
<td>Proprietary</td>
</tr>
<tr>
<td>513-77-9</td>
<td>Barium Carbonate</td>
<td>Proprietary</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>Titania</td>
<td>Proprietary</td>
</tr>
<tr>
<td>584-08-7</td>
<td>Potassium Carbonate</td>
<td>Proprietary</td>
</tr>
<tr>
<td>15432-85-6</td>
<td>Sodium Antimonate</td>
<td>Proprietary</td>
</tr>
<tr>
<td>14940-68-2</td>
<td>Zircon</td>
<td>Proprietary</td>
</tr>
<tr>
<td>14542-23-5</td>
<td>Fluorspar</td>
<td>Proprietary</td>
</tr>
<tr>
<td>497-19-8</td>
<td>Soda Ash</td>
<td>Proprietary</td>
</tr>
<tr>
<td>7631-99-4</td>
<td>Sodium Nitrate</td>
<td>Proprietary</td>
</tr>
<tr>
<td>16893-85-9</td>
<td>Sodium Fluorsilicate</td>
<td>Proprietary</td>
</tr>
<tr>
<td>13755-29-8</td>
<td>Sodium Fluoborate</td>
<td>Proprietary</td>
</tr>
<tr>
<td>18282-10-5</td>
<td>White Tin Oxide</td>
<td>Proprietary</td>
</tr>
<tr>
<td>1306-19-0</td>
<td>Cadmium Oxide</td>
<td>Proprietary</td>
</tr>
<tr>
<td>80480-70-5</td>
<td>Cadmium Zinc Sulfide Yellow</td>
<td>Trace</td>
</tr>
<tr>
<td>12656-57-4</td>
<td>Cadmium Sulfoseleinite Orange</td>
<td>Trace</td>
</tr>
<tr>
<td>12214-12-9</td>
<td>Cadmium Selenide Sulfide</td>
<td>Trace</td>
</tr>
<tr>
<td>68187-11-1</td>
<td>Blue Green Spinel V-9248</td>
<td>Trace</td>
</tr>
<tr>
<td>10101-52-7</td>
<td>Zirconium Silicate</td>
<td>Proprietary</td>
</tr>
<tr>
<td>21645-51-2</td>
<td>Aluminum Hydrate</td>
<td>Proprietary</td>
</tr>
<tr>
<td>12068-56-3</td>
<td>Aluminum Silicate</td>
<td>Proprietary</td>
</tr>
<tr>
<td>68187-15-5</td>
<td>Zirconium Praseodymium Silicate</td>
<td>Proprietary</td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures
Description of first aid measures
First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air. If irritation develops, call a physician. Prolonged exposure may cause irritation to respiratory tract.
First-aid measures after eye contact: Dust may irritate eyes. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion: Rinse mouth. Do not induce vomiting. For large amounts, call the Poison Control Center.

SECTION 5: Firefighting measures
This product is not combustible or explosive.
Fire hazard: None
Explosion hazard: None
Reactivity: None

SECTION 6: Accidental release measures
Personal precautions, protective equipment and emergency procedures
General measures: Avoid breathing (vapor, mist). Use in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice.
Methods and material for containment and cleaning up: If not contaminated, scoop up and use. If contaminated, sweep up and discard in trash can.

SECTION 7: Handling and storage
Precautions for safe handling: Keep out of reach of children. Avoid breathing mist, spray, vapors.
Use in a well-ventilated area. Wear recommended personal protective equipment.
Hygiene measures: Handle in accordance with good industrial hygiene and safety procedures.
Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work area.
Storage: Store in a dry area away from food.

SECTION 8: Exposure Controls/Personal protection
Personal protection: Ensure adequate ventilation, especially in confined areas. Use NIOSH approved dust respirator if 15mg/M³ (for inert or nuisance dust) working conditions are exceeded.
Insufficient ventilation: wear respiratory protection.
Use judgment-avoid getting enamel in eyes.

SECTION 9: Physical and chemical properties
Physical state: Solid
Appearance: Powder, frit, lump, threads
Color: Various
Odor: Odorless glass, except for some reds and yellows which may give off a slight odor when fired.
Melting point: >850°

SECTION 10: Stability and reactivity
Chemical Stability: Stable
Reactivity: Nonreactive.
SECTION 11: Toxicological information
Information on toxicological effects: Conforms to ASTM D-4236
Serious eye damage/irritation: Potential for irritation is not considered severe enough to warrant classification given the intended use of this product.
Respiratory or skin sensitisation: None
Skin corrosion: None
Carcinogenicity: None

SECTION 12: Ecological information
No specific ecological data available for this product.

SECTION 13: Disposal considerations
Waste disposal recommendations: Trash can.

SECTION 14: Transportation information
This product is not Department of Transportation (DOT) regulated or restricted for transport by IATA.
This product is not TDG (Canada) regulated.

SECTION 15: Regulatory information
N/A

SECTION 16: Other information
References
DOT Department of Transportation
OSHA Occupational Safety and Health Administration
CAS Chemical Abstracts Service
TSCA Toxic Substances Control Act

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.
The information and recommendations contained in this SDS have been compiled from sources believed to be reliable and to represent current opinion on the subject when the SDS was prepared. No warranty, guaranty or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine its environmental regulatory compliance obligations under any applicable federal or state laws.

UPDATED AUGUST 2018