# SDS Frit, Lead Free Opaque Yellow-Orange-Red Enamels



# 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

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The specific chemical

identites/percentages are being withheld as a trade secret (29CFR1910.1200).

# **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:

Cas #	Component	Percentage
14808-60-7	Silica	Proprietary
15432-85-6	Sodium Antimonate	Proprietary
1303-96-4	Borax	Proprietary
554-13-2	Lithium Carbonate	Proprietary
14542-23-5	Fluorspar	Proprietary
513-77-9	Barium Carbonate	Proprietary
13463-67-7	Titania	Proprietary
14940-68-2	Zircon	Proprietary
497-19-8	Soda Ash	Proprietary
7631-99-4	Sodium Nitrate	Proprietary
16893-85-9	Sodium Fluorsilicate	Proprietary
584-08-7	Potassium Carbonate	Proprietary
18282-10-5	White Tin Oxide	Proprietary
68187-15-5	Zirconium Praseodymium Silicate	Proprietary
21645-51-2	Aluminum Hydrate	Proprietary
1306-19-0	Cadmium Oxide	Trace
10101-52-7	Zirconium Silicate	Proprietary
12068-56-3	Aluminium Silicte	Proprietary
80480-70-5	Cadmium Zinc Sulfide Yellow	Trace
12656-57-4	Cadmium Sulfoselenide Orange	Trace
1214-12-9	Cadmium Selenide Sulfide	Trace

#### **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.

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