



# SAFETY DATA SHEET

## 1019669 – KMP4193 CERAMIC FRIT

Not Classified as Hazardous According To Criteria Of WorkSafe Australia

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### 1. MATERIAL & SUPPLIER IDENTIFICATION

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**PRODUCT NAME:** KMP4193 CERAMIC FRIT  
**PRODUCT CODE:** 1019669  
**Other Names:** Ceramic Frit  
**Use:** Frit is used to produce glass coatings on ceramic, steel, aluminium or glass substrates.

**SUPPLIER:** FERRO CORPORATION (AUST.) PTY LIMITED  
**ADDRESS:** 105-115 COCHRANES RD MOORABBIN VIC 3189  
**TELEPHONE:** (03) 9555 9466  
**EMERGENCY PHONE:** (03) 9555 9466 (Normal Business Hours)  
(03) 9796 2194 (After Hours – general information)

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### 2. HAZARDS IDENTIFICATION

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**NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS**  
Not classified as Hazardous According To Criteria Of WorkSafe Australia

UN No: None allocated  
DG Class: None allocated  
Hazchem Code: None allocated  
Poisons Schedule: None allocated

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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**Chemical Name:** FRITS, CHEMICAL  
**CAS Number:** 65997-18-4\*

Frit is a chemically reacted mixture of inorganic substances in the form of essentially insoluble glassy silicates.

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### 4. FIRST AID MEASURES

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**Ingestion:** Rinse mouth. Do not induce vomiting. Seek medical advice.  
**Inhalation:** Move to fresh air. If breathing has stopped, apply artificial respiration and seek medical attention.  
**Eye:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if irritation persists.  
**Skin:** Wash off with soap and plenty of water.

**Advice to Doctor:** Treat symptomatically.

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## 5. FIRE FIGHTING MEASURES

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**FLAMMABILITY:** Not Flammable.

**Fire/Explosion Hazard:**

Material is not combustible and will not burn in a fire.

**Extinguishing Media:**

Use water spray, dry chemical, CO<sub>2</sub>, or foam as required for fighting surrounding fire..

**HAZCHEM CODE:** None allocated

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## 6. ACCIDENTAL RELEASE MEASURES

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**Spills and Disposals:**

Transfer material via scoop or vacuum to closed containers for re-use or disposal.

Minimise the generation of dusts.

Wear apron, rubber gloves, chemical goggles or safety glasses.

Wash clothes before re-use.

No special environmental precautions required.

Disposal should be in accordance with local, state, and federal regulations.

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## 7. HANDLING & STORAGE

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No special transport requirements are necessary.

Store in a cool, dry, well ventilated area away from food, drink and animal feeding stuffs.

Wear personal protective equipment and wash thoroughly after handling.

Containers are to be kept closed when not in use to avoid generating dusts and minimise contamination.

**Work Practices:**

Avoid generating dusts and fumes.

Do not breathe dust or fumes.

Use only with adequate ventilation.

Wash thoroughly before eating, drinking, smoking, or applying cosmetics.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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This product does not have exposure limit values. Exposure limit values for some of the components are listed below as a guideline for safe use of this product.

### Exposure Standards (AIR):

CAS# 14808-60-7	Silica, crystalline, Quartz NOHSC TWA: 0.1 mg/m <sup>3</sup> (respirable dust)
CAS# 1303-96-4	Borax, anhydrous & pentahydrate NOHSC TWA: 1.0 mg/m <sup>3</sup>
CAS# 513-77-9	Barium compounds, Insoluble Schedule 6 POISON (SUSDP)
CAS# 1314-13-2	Zinc oxide (dust) NOHSC TWA: 10 mg/m <sup>3</sup> (inspirable dust)
CAS# Various	Nuisance dusts NOHSC TWA: 10 mg/m <sup>3</sup> (inspirable dust)

Frit is produced by rapidly quenching a molten mixture of inorganic substances in glassy form from high temperature, thereby confining the substances in the frit as chemically reacted non-migratory components in the form of silicates or other essentially insoluble complexes.

Frit therefore does not necessarily have any of the properties of its component oxides or metals.

### Engineering Controls:

Use local exhaust ventilation.

Ventilation is to be adequate to capture the material at the source, and to ensure that the working environment is below the TWA value by using a local exhaust system.

## PERSONAL PROTECTION

**Respiratory Protection:** A respirator conforming to AS1716 suitable for dust should be worn when this material is being used.

**Protective Gloves:** Cotton work gloves should be worn.

**Eye Protection:** Wear general use industrial goggles or safety glasses.

**Clothing:** Clean full-length overalls should be worn.

**Safety Boots:** Safety boots should be worn.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance:	POWDER
Colour:	SEMI-OPAQUE
Odour:	NO ODOUR
Melting/Softening Point:	> 400 C
Specific Gravity:	APPROX. 2.5
Vapour Pressure:	NOT APPLICABLE
Flashpoint:	NOT APPLICABLE
Flammability Limits:	DOES NOT BURN
Solubility in water:	INSOLUBLE

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## 10. STABILITY AND REACTIVITY

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Stable at normal ambient conditions.

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**11. TOXICOLOGICAL INFORMATION**

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**Toxicity Data:**

ORAL: NO DATA FOUND  
DERMAL: NO DATA FOUND  
INHALATION: NO DATA FOUND  
CARCINOGENICITY: NO DATA FOUND

**Health Effects:****Acute:**

Ingestion: Product has low solubility. Ingesting small amounts is unlikely to cause any severe health risks. Large oral doses may cause gastrointestinal irritation.  
Inhalation: Breathing dust may cause respiratory irritation and discomfort.  
Eye: Dust may irritate the eyes – acts as a nuisance dust.  
Skin: Dust may irritate the skin – acts as a nuisance dust.

**Chronic:** Prolonged exposure to dust may lead to pulmonary problems.

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**12. ECOLOGICAL INFORMATION**

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**Ecotoxicity:** No information available

**Persistence /  
Degradability:** No information available

**Mobility:** No information available.

**Bioaccumulative  
Potential:** No information available.

**Environment  
Protection:** Do not allow product to reach waterways, drains and sewers.

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**13. DISPOSAL CONSIDERATIONS**

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Disposal should be in accordance with local, state, and federal regulations.

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**14. TRANSPORT INFORMATION**

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**Land Transport ADG:**

This product does not constitute a hazardous substance in land transport.

**Marine Transport IMDG:**

This product does not constitute a hazardous substance in sea transport.

**Air Transport ICAO/IATA:**

This product does not constitute a hazardous substance in air transport.

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**15. REGULATORY INFORMATION**

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Poisons Schedule:           None allocated

Refer Section 2 – Hazards Identification

Chemical Inventory Information:

AICS:                         Listed

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**16. OTHER INFORMATION**

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Compiled by:               Don Goff – Group Leader Development

Date prepared:             10/3/2005

Date Revised:             8/8/2011

Revision Changes:        Exposure standards updated  
                              Ecological information updated  
                              Transport information updated  
                              Chemical Inventory information added

**KEY:**

ACGIH:                    American Conference of Governmental Industrial Hygienists  
ADG Code:                Australian Code for Transport of Dangerous Goods  
IMDG Code:               International Maritime Code for Transport of Dangerous Goods  
NOHSC:                   National Occupational Health and Safety Commission  
STEL:                     Short Term Exposure Limit  
TLV:                      Threshold Limit Value  
TWA:                      Time Weighted Average

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**- END OF MSDS -**