



SAFETY DATA SHEET

1019667 – KMP4171 CERAMIC FRIT

Not Classified as Hazardous According To Criteria Of WorkSafe Australia

1. MATERIAL & SUPPLIER IDENTIFICATION

PRODUCT NAME: KMP4171 CERAMIC FRIT
PRODUCT CODE: 1019667
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
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(03) 9796 2194 (After Hours – general information)

2. HAZARDS IDENTIFICATION

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

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.

4. FIRST AID MEASURES

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.

5. FIRE FIGHTING MEASURES

FLAMMABILITY: Not Flammable.

Fire/Explosion Hazard:

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

Extinguishing Media:

Use water spray, dry chemical, CO₂, or foam as required for fighting surrounding fire..

HAZCHEM CODE: None allocated

6. ACCIDENTAL RELEASE MEASURES

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.

7. HANDLING & STORAGE

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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 ³ (respirable dust)
CAS# 1303-96-4	Borax, anhydrous & pentahydrate NOHSC TWA: 1.0 mg/m ³
CAS# Various	Nuisance dusts NOHSC TWA: 10 mg/m ³ (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.

9. PHYSICAL AND CHEMICAL PROPERTIES

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

10. STABILITY AND REACTIVITY

Stable at normal ambient conditions.

11. TOXICOLOGICAL INFORMATION

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.

12. ECOLOGICAL INFORMATION

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.

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

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.

15. REGULATORY INFORMATION

Poisons Schedule: None allocated

Refer Section 2 – Hazards Identification

Chemical Inventory Information:

AICS: Listed

16. OTHER INFORMATION

Compiled by: Don Goff – Group Leader Development

Date prepared: 10/3/2005

Date Revised: 2/11/2011

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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