



SAFETY DATA SHEET

1114089 – KMG271D CERAMIC GLAZE

Classified as Hazardous According To Criteria Of WorkSafe Australia

1. MATERIAL & SUPPLIER IDENTIFICATION

PRODUCT NAME: KMG271D CERAMIC GLAZE
PRODUCT CODE: 1114089
Other Names: Ceramic Glaze
Use: Ceramic glazes are used to produce glass coatings on ceramic, steel, aluminium or glass substrates.

SUPPLIER: FERRO CORPORATION (AUST.) PTY LIMITED
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2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS
Classified as Hazardous According To Criteria Of WorkSafe Australia

T - Toxic
R48/23 - Toxic: danger of serious damage to health by prolonged exposure through inhalation.
S22 - Do not breathe dust.
S38 - If insufficient ventilation, wear suitable respiratory equipment.

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: INORGANIC MIXTURE
CAS Number: None allocated

Glazes are milled mixtures of frit, inorganic materials, colouring oxides and small amounts of milling additives.

Ingredients:

Chemical Entity	CAS No	Proportion %	NOHSC mg/m ³
Frit	65997-18-4*	> 60	none set
Silica (Quartz)	14808-60-7	10 - < 30	0.1 (respirable dust)
Nuisance dusts	various	to 100	10.0 (Inspirable dust)

Lead Content: approx. 0.5% as PbO (theoretical)

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

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 and pentahydrate NOHSC TWA: 1.0 mg/m ³
CAS# 7439-92-1	Lead, Inorganic dusts and fumes, (as Pb) NOHSC TWA: 0.15 mg/m ³ (under review)
CAS# Various	Nuisance dusts , various NOHSC TWA: 10.0 mg/m ³

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 particulate respirator Class P2 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:	OFF-WHITE
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: Product contains respirable crystalline silica as quartz. Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources has been classified by International Agency for Research on Cancer (IARC) as carcinogenic to humans (Group 1).

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. Products, which contain crystalline silica, may have a proportion become airborne as respirable dust when in the dry form. Repeated exposure to respirable crystalline silica may lead to silicosis, a serious lung disease. The onset of silicosis is usually slow and lung damage may occur even when no symptoms or signs of ill-health have occurred. Development of silicosis may increase the risk of later development of lung cancer. It may also lead to other diseases including heart disease and scleroderma.

12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

UN No: None allocated

DG Class: None allocated

Hazchem Code: None allocated

Not classified for transport as a dangerous good as defined by the ADG Code.

15. REGULATORY INFORMATION

Poisons Schedule: None allocated

Refer Section 2 – Hazards Identification

16. OTHER INFORMATION

Compiled by: Don Goff – Group Leader Development
Date prepared: 2/11/2005
Date Revised: 28/6/2007

Revision Changes: Updated Hazard classification and Risk and Safety phrases.
Statement of carcinogenicity for respirable crystalline quartz included.

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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