



# Material Safety Data Sheet

## DA4194

### Frit 4194

Clays Glazes Colours

<b>Company Details</b>	Walker Ceramics 5 McLellan Street Bayswater Victoria 3153, Australia Telephone (03) 8761 6322 Fax (03) 8761 6344 Email <a href="mailto:sales@walkerceramics.com.au">sales@walkerceramics.com.au</a> Website <a href="http://www.walkerceramics.com.au">www.walkerceramics.com.au</a> Date Of Issue: March 2019
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IDENTIFICATION	
Product Name	Frit
Other Names	Ceramic frit
Manufacturers Product Code	DA4194
UN Number	None
Dangerous Goods Class & Subsidiary Code	None
Hazchem Code	None
Poisons Schedule Number	65997-18-4
Use(s)	A glass like material which is applied and fired to produce a ceramic coating on ceramic substrates.

PHYSICAL DESCRIPTION / PROPERTIES	
Appearance	Clear or semi-opaque glassy flakes, granules or powder.
Boiling Point / Melting Point	>300°C
Vapour Pressure	Not applicable
Specific Gravity	Approx 2.5
Flashpoint	Not applicable
Flammability Limits	Not applicable
Solubility in Water	Negligible
Other Properties	Frit is a mixture of inorganic substances produced by rapidly quenching a molten, complex combination of materials, confining the chemical substances thus manufactured as a non-migratory components of glassy solid flakes or granules. Fit may

INGREDIENTS		
Chemical Name	CAS Number	Proportion (%)
Silica (Quartz)	14808-60-7	30-60
Borax, anhydrous	1303-96-4	10--30
Fluorides as F	Not listed	<10
Nuisance Particulates	Various	100

FIRST AID	
Swallowed	Give water or milk. Seek medical advice.
Eye	Irrigate with water for at least 15 minutes and seek medical advice if symptoms persist.
Skin	Wash thoroughly with soap and water. Change into clean clothing and launder contaminated clothing.
Inhaled	Remove to fresh air. Encourage patient to clear nasal passages. If breathing has stopped apply artificial respiration and seek immediate medical assistance.
First Aid Facilities	Washing area, eye wash.
<b>Advice To Doctor</b>	Considered practically non harmful. Treat symptomatically.

**HEALTH HAZARD INFORMATION**

<b>Acute</b>	The hazardous ingredients listed for this product are incorporated into the glass-like structure of the frit, chemically reacted in the form of silicates or other essentially insoluble complexes. Exposure to the hazardous ingredients can occur if frit dust is inhaled or ingested and the ingredients dissolve out of the glass. Because of the chemical stability of frit and its resistance to attack by acids or alkalis, this is anticipated to occur very slowly. Due to the abrasive nature of frit, mechanical irritation of the skin and eyes can occur, particularly if exposure is long or repeated. Certain components are listed as hazardous ingredients because they are considered to be nuisance particulates. Nuisance particulates used in this product may include Aluminium Oxide (alumina), Calcium carbonate and Zinc Oxide. Nuisance particulates can cause unpleasant or uncomfortable deposits in the eyes, ears and nose, but do not cause any toxic effect when exposures are kept in reasonable control. Silica dust may cause mechanical irritation of the eyes, skin and respiratory tract. Prolonged or repeated exposure to crystalline silica dust can result in fibrotic damage (silicosis) in some people. Crystalline silica has been listed as a possible human carcinogen. Hydrated or anhydrous forms of borax (sodium tetraborates) in an occupational environment are considered hazardous because of their irritating effects on the eyes, nose and throat. Reports of accidental ingestion of borax indicate that it can cause effects on the gastrointestinal tract, kidneys and central nervous system depression. Significant routes of exposure are through inhalation and direct contact. Inorganic fluoride compounds in excessive airborne concentrations are irritating to the eyes and respiratory tract. Chronic overexposure can cause a disease known as fluorosis which results in disabling bone damage.
Swallowed	Large doses may cause gastro-intestinal irritation.
Eye	The dust may cause irritation of the eyes.
Skin	The dust may cause irritation and dryness of the skin.
Inhaled	Breathing the dust may cause respiratory irritation and discomfort
<b>Chronic</b>	No specific information is available.

**PRECAUTIONS FOR USE**

Exposure Standards	Silica (as respirable dust) ACGHI 0.01 mg/m3  Borax, Anhydrous ACGHI 1.0 mg/m3  Fluorides ACGHI 2.5 mg/m3  Nuisance Particulates ACGIH 10.0 mg/m3 (total dust)  ACGIH = American Conference of Governmental Industrial Hygienists. TWA = Time Weighted Average NOHSC =National Health & Safety Commission
Engineering Controls	Ensure workplace is well ventilated.
Personal Protection	Approved respirator to AS1715 to be worn, gloves, safety glasses and protective overalls. Wash hands and face thoroughly after handling and before work breaks, eating, drinking, smoking and using toilet facilities.
Flammability	Not flammable under the conditions of use but the containers may burn.

**SAFE HANDLING INFORMATION**

Storage & Transport	Store and transport in accordance with all regulations. Keep tightly closed in a dry, cool and well-ventilated place. Not subject to hazardous substances labelling.
Spills & Disposal	Dispose of in accordance with all Local, State and Federal regulations by incineration or disposal to landfill.
Fire / Explosion Hazard	Fire-fighters should wear full protective clothing including self-contained breathing apparatus. Use water, foam or dry extinguishing media. Use equipment/media appropriate to surrounding fire conditions. Dispose of fire debris and contaminated extinguishing water in accordance with local regulations.

**OTHER INFORMATION**

Unless adequately fired, utensils glazed with this preparation must not be used as containers for food or beverages. To do so may lead to lead poisoning.

AUSTRALIAN POISONS INFORMATION CENTRE

24 HOUR SERVICE 13 11 26

POLICE / FIRE / AMBULANCE 000

**CONTACT POINT**

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This MSDS summarises, at the date of issue, our best knowledge of the health & safety hazard information for this product, and in particular how to safely handle and use this product in the workplace. Since Walker Ceramics and its agents cannot anticipate or control the conditions under which this product may be used, each user must prior to usage, review this MSDS in the context of how the user intends to handle and use this product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact us.

Our responsibility for products sold, is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request