

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Fired Up Kilns (AUS)

20 Helen Street,

Heidelberg West 3081 Victoria Australia

Tel +61 (0) 3 7013 9025 hello@firedupkilns.com.au

COMPOSITION/DATA ON COMPONENTS:

CHEMICAL FAMILY: Inorganic PRODUCT NAME: TURQUOISE

CAS #: 68186-95-8

CHEMICAL NAME: C.I. Pigment Blue 71

CHEMICAL FORMULA: VZrSi

This product is a blend of various metal oxides, salts and some other compounds which are interfused by high temperature calcination to form the insoluble finished product which typically does not exhibit the properties of the individual components.

Hazardous Components

Stain is a fused substance. The components of the final product listed below are from the inventory of potentially hazardous substances referenced by FED-OSHA in 29 CFR 1910.1200

	Exposure Limit (Air), mg/m3			
COMPONENT	ACGIH/TLV	FED-OSHA/PEL	CAL-OSHA/PEL	
Vanadium Oxide (VO ₃) (CAS 1314-62-1)	0.05	0.05	0.05	

ACGIH: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of carcinogenicity in humans/animals.

Symptoms of overexposure:

Inhalation: Irritation of the respiratory tract, chest tightness, wheezing and coughing.

Eye Contact: Irritation possible with corneal injury.

Skin Contact: Irritation with reddening and itching. Absorption of harmful amounts possible.

Ingestion: Abdominal discomfort, nausea, vomiting, cramping. Harmless greenish tongue discoloration.

	Exposure Limit (Air), mg/m3			
COMPONENT	ACGIH/TLV	FED-OSHA/PEL	CAL-OSHA/PEL	
Zirconium Silicate (ZrO) (CAS 1314-24-4)	10/5 resp	15/5 resp	5	

ACGIH: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of carcinogenicity in humans/animals.

Symptoms of overexposure:

Inhalation: Acute inhalation to respirable dust which contains radioactive uranium, thorium and

radium may cause lung cancer.

Eye Contact: May cause abrasions of the cornea.

Skin Contact: Not applicable. Ingestion: Not applicable.



	Exposure Limit (Air), mg/m3			
COMPONENT	ACGIH/TLV	FED-OSHA/PEL	CAL-OSHA/PEL	
Silica, Crystalline (SiO2) (CAS 14808-60-7)	0.1	10	0.05	

ACGIH: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of carcinogenicity in humans/animals.

Symptoms of overexposure:

Inhalation: a) Prolonged exposure to respirable crystalline silica (quartz) can cause Silicosis, afibrosis (scarring)

of the lungs. Silicosis may be progressive; it may lead to disability and death. Silicosis increases risk

of Tuberculosis.

b) Inhaled from occupational sources is classified as carcinogenic to humans.

c) There is evidence that exposure to respirable crystalline silica or that the disease

Silicosis is associated with increased incidence of Scleroderma, an auto-immune disorder manifested

by fibrosis (scarring) of the skin and internal organs.

d) There are several studies suggesting that exposure to respirable silica or that the disease Silicosis

is associated with the increased incidence of kidney disorders.

(Nephrotoxicity)

Eye Contact: May cause abrasions of the cornea.

Skin Contact: Not applicable. **Ingestion:** Not applicable.

SARA III DATA

This product contains the following component(s) that require reporting under section 313 of the Emergency Section of the Emergency Planning and Community Right-To-Know Act, also known as Title III of the SARA and 40 CFR Part 372.

COMPONENT PERCENT PRESENT

Vanadium Compounds ~ 5 %

The percent reported is based on the theoretical composition of this Stain.

PHYSICAL DESCRIPTION/PROPERTIES:

APPEARANCE: Turquoise powder.

ODOUR: None.

BOILING POINT: Not Applicable

MELTING POINT: > 600°C

VAPOUR PRESSURE: Not Applicable

SPECIFIC GRAVITY: 1.6 – 3.0 **SOLUBILITY IN WATER:** Negligible

VISCOSITY: No Data

pH: Neutral

VOLATILE ORGANIC COMP: None

FIRE & EXPLOSION HAZARD

FLASH POINT: N/A

FLAMMABLE LIMITES: N/A
EXTINGUISHING MEDIA: None

USUAL FIRE & EXPLOSION HAZARD: None

REACTIVITY DATA

STABILITY: Stable INCOMPATABILITY: N/A

HAZARDOUS DECOMPOSITION PRODUCTS: Avoid fumes from firing

HAZARDOUS POLYMERISATION: Will not occur



HEALTH HAZARD DATA

PRINCIPAL ROUTES OF ABSORPTION: Inhalation and Ingestion

EFFECTS OF OVER EXPOSURE: Prolonged contact with stain dust can be very irritating to the eyes and/or skin. High dust levels can be irritating to the respiratory tract. Over exposure to dust may cause lung damage. With adequate ventilation, dust control and good personal hygiene, symptoms of over exposure should not occur. Ingestion of large amounts of stain may cause irritation of the gastrointestinal tract, nausea, vomiting and diarrhoea. Advise regular medical monitoring of employees by a physician competent in industrial health.

CARCINOGECITY: N/A

EMERGENCY & FIRST AID PROCEDURES: If overexposure is suspected move employees to fresh air; if breathing is difficult give oxygen. Call a physician. For dust in eyes, flush immediately with clean water and call a physician. If ingested, give large amounts of water to induce vomiting, only in conscious person.

SOURCES OF HEALTH HAZARD DATA: The MSDS was developed from information on the constituent substances of this stain material, not from test data on the stain itself.

PRECAUTIONS FOR SAFE HANDLING AND USE: STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Uncontaminated material may be recovered and re-used. If contaminated, scoop, vacuum or wash into a receptacle or disposal.

WASTE DISPOSAL METHOD: Follow Federal or State and Local regulations for disposal. **PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Protect containers against physical damage, store in a dry area away from feed and food products.

OTHER PRECAUTIONS: Employees should wash and change into clean clothes before going home.

CONTROL MEASURES

RESPIRATORY PROTECTION: Use a NIOSH approved dust and/or fume respirator as necessary.

VENTILATION: Local Exhaust – Recommended for dust control; vent dust to collector.

PROTECTIVE GLOVES: Use judgment – work gloves recommended. **EYE PROTECTION:** Use judgment – safety glasses recommended.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear appropriate clean, protective clothing such as, but not limited to coveralls, smock, aprons, gloves, shoes and hats.

WORK/HYGENIC PRACTICES: Food, beverages and smoking materials should NOT be in the working area. Hygiene is very important; employees should wash thoroughly before eating, drinking or smoking.

REGULATORY INFORMATION:

CLASSIFICATION AND LABELLING (EEC)

Classification:

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Label Information:

R-20 Harmful by inhalation.

R-22 Harmful if swallowed.

R-36/37/38 Irritating to eyes, respiratory system and skin. S-7

Keep container tightly closed.

S-22 Do not breathe dust.

S-24/25 Avoid contact with skin and eyes.

S-28 After contact with skin, wash immediately with plenty of water.

S-51 Use only in well ventilated areas.



OTHER INFORMATION: DISCLAIMER:

Supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will conduct his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Material Safety Data Sheet before handling product.

KEY/LEGEND:

NA = Not available or Not Applicable; ACGIH = American Conference of Governmental Industrial Hygienists; TLV = Threshold Limit Value; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; CAL/OSHA = California Occupational Safety and Health Administration; CFR = Code of Federal Regulations; FED/OSHS = Federal Occupational Safety and Health Administration; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; PEL = Permissible Exposure Limits; TSCA – Toxic Substances Control Act; TWA = Time Weighted Average; US-EPA = US Environmental Protection Agency.

Disclaimer.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.