SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Material number : **38K020B**

Trade name :**Stoneware Brush-on Glaze**

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Ceramic coating suited for firing, for ceramics.

1.3 Details of the supplier of the safety data sheet

Company : Milton Bridge Ltd.
Unit 9 Trent Trading Park, Botteslow St
Hanley, Stoke-On-Trent ST1 3LY

Telephone : +441782274229

E-mail address : djb@milton-bridge.co.uk
Responsible/issuing person

1.4 Emergency telephone number

In-Country Number : +(44)-1782 274229
CHEMTREC Global Number : +(1)-703-527-3887(Call Collect)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Aquatic Acute 1, H400
Very toxic to aquatic life with long lasting effects 1, H410

Classification according to Directive 67/548/EEC or 1999/45/EC

Xn; R22 – Xi;R36

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)



Signal word: Danger

Hazard Statements: H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects. H412: Harmful to aquatic life with long lasting effects. H302 - Harmful if swallowed. H319: Causes serious eye irritation.

Precautionary Statements: : P261 Avoid breathing dust. P273: Avoid release to the environment. P391: Collect spillage. P501: Dispose of contents and container in accordance with all local, regional, national and international regulations. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P285: In case of inadequate ventilation wear respiratory protection. P304 + P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. . P342 + P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. P501: Dispose of contents/container to an approved waste disposal plant.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical nature : glass/frit, silicatic material

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
Substances with a workplace exposure limit :			
Frits ,Chemicals	65997-18-4		< 100
Copper Oxide (FeO)	215-269-1 1317-38-0	Aquatic Acute 1 H400 Aquatic Chronic 3: H412	< 2
Lithium Carbonate	554-13-2 209-062-5 01-211951634-53	Acute tox. 4 H302 Eye irr. 2 H319	< 5
Zinc Oxide (FeO)	1317-38-0 215-222-5 554-13-3 01-2119463881-32-0039	Aquatic Acute 1 H400 Aquatic Chronic 1: H410	<4
Cobalt oxide (CO3 O4)	1380-06-1 2152572 01-2119517310-56	Resp. Sens. 1; Aquatic Chronic 3; H334, H412	<1

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice : Do not leave the victim unattended.

If inhaled : If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.

In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
Keep respiratory tract clear.
Do not induce vomiting
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : None known.
Risks : None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : In the event of fire, the product may emit harmful or toxic fumes.

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use Personal Protective equipment
Ensure adequate ventilation
Evacuate personnel to safe areas

6.2 Environmental precautions

Environmental precautions : No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.
No special handling advice required.
Smoking, eating and drinking should be prohibited in the application area.
Store in a dry area away from foodstuffs.

Advice on protection against fire and explosion : Normal measures for preventative fire protection.

Hygiene measures : General industrial hygiene practice.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.

Advice on common storage : No special restrictions on storage with other products. No materials to be especially mentioned.

Other data : Keep in a dry place. No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Consult the technical guidelines for the use of this substance/mixture.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

Country	**Long term Exposure limit** **8h TWA**	**Short Term Exposure Limit** **15m TWA**	Notes	Source
Australia	1 mg/m^{3}1		Copper, dusts and mists (as Cu)	NOHSC: 1003*
UK	mg/m^{3}0.1	2 mg/m^3	Copper, dusts and mists (as Cu)	OHSA website**
Germany	mg/m^3	0.2 mg/m^3	Copper and its inorganic compounds, inhalable aerosol.	OHSA website**
France	1 mg/m^3	2 mg/m^3	Copper, dusts and mists (as Cu)	OHSA website**
Spain	1 mg/m^3		Copper, dusts and mists (as Cu)	OHSA website**
Netherlands	0.1 mg/m^3	0.2 mg/m^3	Inhalable aerosol	OHSA website**

Predicted No Effect Concentrations (PNECs) and Derived No Effect Levels (DNELs)

Worker			
Long term systemic effects	Dermal (external)	DNEL for dry Copper compounds	137mg/kg bw/day
Long term systemic effects	Dermal (external)	DNEL fpr dry slurries or Copper compounds found in solution DNEL based on internal Copper dose	137mg/kg bw/day
General population:	Oral (external)	PNEC, including a default bioavailability correction	0.041 mg CU/kg bw/day
Long term systemic effects	Freshwater	PNEC, including a default bioavailability correction	7.8µg dissolved Cu/L. (1)
	Marine Water	PNEC	5.2µg dissolved Cu/L. (1)
Envitronmental	Sediment freshwater	PNEC	87 mg Cu/kg dry wt. (1)
	Sediment estuarine		**288** mg **Cu/kg dry wt**. (1)

	Sediment marine Soil STP	PNEC, including a default bioavailability correction PNEC PNEC	676 mg Cu/kg dry wt. (1) 65 mg Cu/kg dry wt. (1) 0.23 mg dissolved

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses

Hand protection
Remarks : For prolonged or repeated contact use protective gloves.

Skin and body protection : Protective suit

Respiratory protection : No personal respiratory protective equipment normally required.

Protective measures : Wear suitable protective equipment
When using do not eat, drink or smoke.

Environmental exposure controls

General advice : No special environmental precautions required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance : Liquid

Colour : Light Grey

Odour : Odourless

Odour Threshold : Not applicable

pH : No data available

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point	: Not applicable
Evaporation rate	: Not applicable
Flammability (solid, gas)	: No data available
Burning rate	: No data available
Auto-ignition temperature	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Density	: No data available
Bulk density	: No data available
Solubility(ies)	
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: Not applicable
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: Not applicable
Explosive properties	: No data available

9.2 Other information

Refractive index : Not applicable

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under recommended storage conditions.
No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No hazards to be specially mentioned.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

Hazardous decomposition products : Stable under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks: According to the classification criteria of the European Union, the product is not considered as being a skin irritant. The material is not a primary irritant but, as with any abrasive powder, it may give rise to minor irritation. Some cobalt compounds have been shown to cause dermatitis and sensitisation, but is unlikely with our product

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: May cause irritation and inflammation.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.
Respiratory sensitisation: Harmful by inhalation and if swallowed.

Product:

Remarks: No data available

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: No data available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : Product is slightly water pollutive

Chronic aquatic toxicity : No data available

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Components:

Biodegradability : Remarks: No data available

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

Bioaccumulation : Remarks: No data available

12.4 Mobility in soil

Product:

Components:

Distribution among environmental compartments : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

Additional ecological information : Remarks: No data available
There is no data available for this product.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product : Dispose of in accordance with the current Waste Disposal Regulations. (for UK special Waste Regulations 1996).

Contaminated packaging : Empty remaining contents.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Remarks : No information available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Ship type : N/A
Pollution category : N/A

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors : Neither banned nor restricted

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Neither banned nor restricted

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Neither banned nor restricted

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Neither banned nor restricted

REACH - List of substances subject to authorisation (Annex XIV) : Neither banned nor restricted

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Neither banned nor restricted

Regulation (EC) No 850/2004 on persistent organic pollutants : Neither banned nor restricted

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
Not applicable

The components of this product are reported in the following inventories:

REACH : On the inventory, or in compliance with the inventory

CH INV : Not in compliance with the inventory

TSCA : Not On TSCA Inventory

DSL : This product contains the following components that are not on the Canadian DSL nor NDSL.

AICS : Not in compliance with the inventory

NZIoC : Not in compliance with the inventory

ENCS : Not in compliance with the inventory

ISHL	: Not in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: Not in compliance with the inventory
TW INV	: Not in compliance with the inventory
MY INV	: Not in compliance with the inventory
TR INV	: Not in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA), CH INV (Switzerland), MY INV (Malaysia), TR INV (Turkey), TW INV (Taiwan)

15.2 Chemical Safety Assessment

Not applicable

SECTION 16: OTHER INFORMATION

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.