

MATERIAL SAFETY DATA SHEET

According to NOHSC: 2011 (2003) and HSNO CoP 8-1 (September 2006)

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: **MASTERFLOW 648CP PLUS PART C**

Other name: None allocated

Recommended use: Part C of a three component, heavy duty, high strength flowable grout for use at elevated service temperatures.

Supplier: BASF New Zealand Ltd.

Address: 45 William Pickering Drive,
Albany, Auckland,
New Zealand

Telephone number: +64 9 414 7233

Facsimile: +64 9 414 7244

Emergency telephone number: 0417 658 263

2. HAZARDS IDENTIFICATION

Hazard classification: HAZARDOUS SUBSTANCE. NON DANGEROUS GOODS
Non Dangerous goods for transport according to the ADG code.
Hazardous according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and NOHSC.

Hazard Designation: Silica, Crystalline Quartz – Human Carcinogen

HSNO Classification

6.7A	Known or presumed human carcinogens
6.9A	Toxic to human target organs or systems (inhalation).

Risk phrase(s): R48/20 Danger of serious damage to health by prolonged exposure through inhalation.

Safety phrase(s):

S22	Do not breathe dust.
S38	If insufficient ventilation, wear suitable respiratory equipment.
S45	In case of accident or if you feel unwell seek medical advice immediately
S37/39	Wear suitable gloves and eye/face protection.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Proportion</u>
Silica, Crystalline Quartz blend	148080-60-7	> 60%
Almandite garnet	1302-62-1	10 -< 30%
Soda lime glass	65997-17-3	10 -< 30%
Non hazardous ingredients		To 100%

4. FIRST AID MEASURES

Inhalation: Avoid breathing dust. Use in well ventilated areas. If inhalation occurs, remove victim from exposure. If difficulty breathing, administer oxygen. If breathing stopped administer artificial respiration. Seek medical attention.

Eyes: While holding eyes open, gently flood with plenty of fresh water for 15 minutes. Seek medical attention. Skilled personnel should only undertake removal of contact lenses after an eye injury.

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<u>Skin:</u>	Remove contaminated clothing. Remove excess from skin mechanically. Wash contacted areas thoroughly with soap and water. If irritation develops seek medical attention. Wash contaminated clothing before re-use.
<u>Ingestion:</u>	Not a normal route of injury. Do not induce vomiting; give large quantities of water; get immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquids into lungs. Do NOT give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

<u>Suitable extinguishing media:</u>	As for surrounding fire.
<u>Hazards from combustion products:</u>	Not normally combustible.
<u>Precautions/equipment for fire fighters:</u>	As for surrounding fire.
<u>Hazchem code:</u>	None allocated.

6. ACCIDENTAL RELEASE MEASURES

<u>Methods and materials for containment and clean up:</u>	Spills should be carefully swept up and then shovelled into appropriately labelled containers. Disposal should be effected by an approved waste disposal organisation according to local regulations.
<u>Environmental precautions:</u>	Do not allow to enter into drains, sewers or waterways.

7. HANDLING AND STORAGE

<u>Precautions for safe handling:</u>	Wear personal protective equipment (PPE) as per Section 8. Provide for good ventilation. Avoid inhalation of dust.
<u>Conditions for safe storage:</u>	Keep containers tightly closed; store under cool dry conditions. Keep out of reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Ventilation:</u>	Ensure adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particles below the OEL (Occupational Exposure Limit), suitable respiratory protection must be worn.
<u>Exposure Standards</u>	Silica, Crystalline - Quartz (14808-60-7) ES-TWA: 0.1 mg/m ³ (Silica Quartz, respirable, NOHSC) ES-TWA#: 0.1 mg/m ³ (QLD); 0.15 mg/m ³ (NSW) WES-TWA: 0.2 mg/m ³
<u>Personal Protective Equipment (PPE):</u>	
<u>Respiratory protection:</u>	At high dust levels, wear a Class P3 (Particulate) respirator or a Powered Air Purifying Respirator (PAPR) with Class P3 (Particulate) filter. Where an inhalation risk exists, wear a Class P1 (Particulate) Respirator.
<u>Glove type (AS2161):</u>	Impervious gloves e.g. PVC or nitrile rubber gauntlets to protect from abrasion.
<u>Eye protection:</u>	Suitable industrial safety eye wear such as goggles, safety glasses or face shield to prevent impact

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<u>Clothing:</u>	No special clothing required but overalls or other suitable industrial clothing which provides full skin coverage are suggested as a general precaution, especially where heavy contamination is likely.
<u>Other:</u>	Use barrier creams to protect skin from contact with the material. Do not eat drink or smoke while working with the material. Always wash hands before smoking, eating, drinking or using the toilet and after finishing work. Observe the usual precautions when handling chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Appearance:</u>	Cement grey granular powder.
<u>Odour:</u>	Odourless
<u>pH:</u>	Not applicable.
<u>Explosion Limit:</u>	Not applicable
<u>Solubility in water:</u>	Insoluble.
<u>Specific gravity:</u>	ca 2.65
<u>Melting point:</u>	> 1200°C
<u>Flash point:</u>	Not applicable

10. STABILITY AND REACTIVITY

<u>Chemical stability:</u>	Normally stable when stored in original sealed containers in cool dry conditions. Not sensitive to mechanical impact.
<u>Incompatible materials:</u>	Hydrofluoric acid.
<u>Hazardous decomposition products:</u>	Not applicable
<u>Hazardous reactions:</u>	Soluble in hydrofluoric acid giving off heat.

11. TOXICOLOGICAL INFORMATION

<u>Health Hazard Summary:</u>	Overexposure to respirable dust may cause coughing, wheezing, difficulty in breathing and impaired pulmonary function. Chronic symptoms include decreased vital lung capacity and chest infections. Avoid eye contact or dust inhalation. This product has the potential to cause acute and chronic health effects with over exposure. Crystalline silica can cause silicosis a disabling form of pneumoconiosis (lung disease), which leads to fibrosis with chronic over exposure. Crystalline silica is classified as carcinogenic to humans (IARC Group 1).
<u>Inhalation:</u>	The dust is harmful and irritating to the upper respiratory tract and lungs. The material presents a hazard from repeated exposures over long period.
<u>Eyes:</u>	The dust and particles are abrasive and irritating to the eyes and may be capable of causing corneal scarring.
<u>Skin contact:</u>	May cause irritation through dermal abrasion.
<u>Ingestion:</u>	Swallowing may result in irritation to mouth and stomach through abrasion.
<u>Toxicity Data:</u>	Silica, Crystalline - Quartz (14808-60-7) Carcinogenicity: Classified as a human carcinogen (IARC Group 1) Health Surveillance: Required [NOHSC:1005(1994)]

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12. ECOLOGICAL INFORMATION

Ecology: Do not discharge into drains, sewers or waterways.

13. DISPOSAL CONSIDERATIONS

Disposal method and containers: Ensure containers are sealed. Avoid dust generation. Dispose of to an approved land fill site. Refer to local Waste Management Authority.

Special precautions (landfill/incineration): None known

14. TRANSPORT INFORMATION

UN number: None allocated

UN proper shipping name: None allocated.

Dangerous goods class: None allocated

Subsidiary risk: None allocated

EPG card: None allocated

Packing group: None allocated

Hazchem code: None allocated

15. REGULATORY INFORMATION

NICNAS / AICS: All components are listed

Poisons Schedule: Not Scheduled

HSNO Classifications: 6.7A, 6.9A

ERMA Group Standard: HSR002544

ERMA / NZIoC: All components are listed

Tracking: Not required

Approved Handler: Not required

16. OTHER INFORMATION

Reason for issue: NZ specific MSDS

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. 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 on request. All information contained in this MSDS is as accurate and up-to-date as possible. No warranty expressed or implied is made as to its accuracy, reliability or completeness.