The Chemical Company

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:	**EMACO T545**	
Other name:	Emaco Set 45	
Recommended use:	Chemical action concrete for fast, permanent concrete repairs.	
Supplier:	BASF Construction Chemicals Australia Pty Ltd. ABN 46 000 450 288	BASF New Zealand Ltd.
Address:	11 Stanton Road, Seven Hills, NSW, 2147 Australia	45 William Pickering Drive, Albany, Auckland, New Zealand
Telephone number:	+61 2 8811 4200	+64 9 414 7233
Facsimile:	+61 2 8811 3299	+64 9 414 7244
Emergency telephone number:	+61 417 658 263	

2. HAZARDS IDENTIFICATION

Hazard classification: HAZARDOUS SUBSTANCE. NON DANGEROUS GOODS.

Hazardous according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001

Hazard Designation: Xn - Harmful

Silica, Crystalline Quartz – Human Carcinogen

HSNO Classification	6.9	Irritating to the respiratory system
	6.9B	Harmful to human target organs and systems (inhalation)
Risk phrase(s):	R37	Irritating to respiratory system.
	R48/20	Danger of serious damage to health by prolonged exposure through inhalation.
Safety phrase(s):	S22	Do not breathe dust.
	S37/39	Wear suitable gloves and eye/face protection.
	S38	If insufficient ventilation, wear suitable respiratory equipment.
	S45	In case of accident or if you feel unwell seek medical advice immediately.
	S 51	Use only in well-ventilated areas.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	***CAS Number***	***Proportion***
Quartz filler blend	14808-60-7	> 60%
Magnesium oxide	1309-48-4	< 10%
Monoammonium phosphate	7722-76-1	< 10%
Fly ash	68131-74-8	< 10%
Non hazardous ingredients		to 100%

4. FIRST AID MEASURES

Inhalation: Use in well ventilated areas. If inhalation does occur, remove victim from exposure. If difficulty with breathing, administer oxygen. If breathing has 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.

Skin: Remove contaminated clothing. Remove excess from skin mechanically. Wash contacted areas thoroughly with soap and water. Do not use solvents or thinners. If irritation develops seek medical attention. Wash contaminated clothing before re-use.

Ingestion: 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

Suitable extinguishing media:	Water Fog, Foam, Carbon Dioxide (CO_2) and Dry Chemical.
Hazards from combustion products:	Not normally combustible.
Precautions and equipment for fire fighters:	Releases small quantities of ammonia on contact with water. Breathing protection may be required in confined conditions.
Hazchem code:	None allocated

6. ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and clean up:	Spills should be vacuumed or carefully swept up and then shovelled into appropriately labelled containers. Avoid dust generation. Disposal should be effected by an approved waste disposal organisation according to local regulations.
Environmental precautions:	Do not empty into drains, sewers or waterways.

7. HANDLING AND STORAGE

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:	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.
Exposure Standards	Silica, Crystalline - Quartz (14808-60-7) ES-TWA: 0.1 mg/m3 (Silica Quartz, respirable, NOHSC) ES-TWA#: 0.1 mg/m3 (QLD); 0.15 mg/m3 (NSW) NZ WES-TWA: 0.2 mg/m3

Personal Protective Equipment (PPE):

Respiratory protection:	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.
Glove type (AS2161):	Impervious gloves e.g. PVC or nitrile rubber gauntlets to protect from abrasion.
Eye protection:	Suitable industrial safety eye wear such as goggles, safety glasses or face shield to prevent impact.

Clothing:	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.
Other:	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

Appearance:	Cement grey granular powder
Odour:	Characteristic odour
pH:	Not applicable
Vapour pressure:	Not applicable
Solubility in water:	Slightly soluble
Specific gravity:	approx. 2.10 g/cm^3 (23°C)
Melting point:	> 1200°C
Flash point:	Not applicable
Boiling point:	Not applicable
Flammability limits:	Not applicable
Viscosity:	Not applicable

10. STABILITY AND REACTIVITY

Chemical stability:	Normally stable when stored in original sealed containers in cool dry conditions. Not sensitive to mechanical impact.
Incompatible materials:	Strong mineral acids, water.
Hazardous decomposition products:	Releases small quantities of ammonia on contact with water.
Hazardous reactions:	Soluble in hydrofluoric acid and other strong mineral acids giving off heat.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary:	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).
Inhalation:	The dust is harmful and irritating to the upper respiratory tract and lungs. The material presents a hazard from repeated exposures over long period. Inhalation of nuisance dust can cause coughing and laboured breathing. In contact with water, ammonia may be released in sufficient quantity to cause irritation to mucous membranes and respiratory tract.
Eyes:	The dust and particles are abrasive and irritating to the eyes and may be capable of causing corneal scarring. In combination with water may cause severe irritation and possibly burns.
Skin contact:	Abrasive action may cause slight to moderate irritation. In combination with water, repeated or prolonged dermal exposure may cause moderate to severe alkali burns.
Ingestion:	Not a likely source of entry due to product use and physical nature of the material, however,

swallowing may result in irritation to mouth and stomach through abrasion.

Toxicity Data: Silica, Crystalline - Quartz (14808-60-7)
Carcinogenicity: Classified as a human carcinogen (IARC Group 1)
Health Surveillance: Required [NOHSC:1005(1994)]

12. ECOLOGICAL INFORMATION

Ecotoxicity: Do not discharge into drains, sewers or waterways. Degradability not determined.

Aquatic toxicity Not available

13. DISPOSAL CONSIDERATIONS

Disposal method and containers: Ensure containers are sealed. Avoid dust generation. Dispose of to an approved land fill site. Refer to 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
Packing group:	None allocated
Hazchem code:	None allocated

15. REGULATORY INFORMATION

NICNAS / AICS:	All components are listed
Poisons Schedule:	Not Scheduled
HSNO Classifications:	6.4A, 6.5B, 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: Update to combined Australia and New Zealand 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.