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:	**PCI NANOFLOTT LIGHT**	
Other name:	None allocated	
Recommended use:	Tile adhesive.	
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: Xi - Irritant

Silica, Crystalline Quartz – Human Carcinogen

HSNO Classification	6.3A	Irritating to the skin
	6.9	Irritating to the respiratory system
	8.3A	Causes serious damage to eyes
Risk phrase(s):	R37/38	Irritating to respiratory system and skin.
	R41	Risk of serious damage to eyes.
Safety phrase(s):	S2	Keep out of reach of children.
	S22	Do not breathe dust.
	S24/25	Avoid contact with skin and eyes.
	S26	In case of contact with skin and eyes, rinse immediately with plenty of water and seek medical advice.
	S27/28	After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap
	S37/39	Wear suitable gloves and eye/face protection.
	S46	If swallowed, seek medical advice immediately and show this container or label.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	***CAS Number***	***Proportion***
Portland cement	65997-15-1	25 – 50%
Silica, Crystalline quartz (contamination from cement)	14808-60-7	< 1%
Hexavalent Chromium (contamination from cement)		Very low
Non hazardous ingredients		to 100%

4. FIRST AID MEASURES

Inhalation: Avoid breathing dust. 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. 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:	As for surrounding fire. Product is non-combustible.
Hazards from combustion products:	Possible release of CO_2 above 600ºC.
Precautions and equipment for fire fighters:	As for surrounding fire.
Hazchem code:	None allocated

6. ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and clean up: Avoid dust formation. Avoid contact with skin and eyes. Use PPE as per Section 8. Spills should be carefully vacuumed up or swept up and then shovelled into appropriately labelled containers. Disposal should be effected by an approved waste disposal organisation according to local regulations.

Environmental precautions: Do not allow to enter 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 formation and inhalation of dust. Avoid skin contact. The cement contained in this product reacts alkaline when in contact with water or humidity. This may cause severe irritation of skin and mucous membranes. The humidity of the skin or mucous membranes is enough for this reaction. Prolonged direct contact to the dry product should be avoided therefore. Pour upwind and allow as little free fall as possible while emptying bags into equipment. Breathing must be protected when large quantities are decanted without local exhaust extraction.

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

Portland Cement (65997-15-1)
ES-TWA: 10 mg/m3 Portland Cement

ES-TWA#: 0.05 mg/m3 Chromium (VI) Compounds (contaminant)
NZ WES-TWA: 10 mg/m3

Hexavalent Chromium (Contaminant)
ES-TWA: 0.05 mg/m3
NZ WES-TWA: 0.05 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 (as per AS2161)
Eye protection:	Chemical worker's goggles, well fitting safety glasses or full face shield.
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:	Fine grey powder
Odour:	Characteristic
pH:	12 – 13 (aqueous suspension)
Vapour pressure:	Not available
Solubility in water:	Dispersible (< 2 g/L at 20°C)
Bulk density:	Not available
Melting point:	Not available
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. The product is hygroscopic.
Incompatible materials:	Acids and strong oxidisers.
Hazardous decomposition products:	May evolve toxic gases if heated to decomposition.
Hazardous reactions:	Exothermal reaction with acids, possible release of CO_2.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary:	Slightly corrosive. See also Section 7. Avoid eye or skin contact or dust inhalation. This product has the potential to cause acute and chronic health effects with over exposure. Crystalline silica can cause silicosis (lung disease) with chronic over exposure. Crystalline

silica and hexavalent chromium compounds are classified as carcinogenic to humans (IARC Group 1).

Inhalation: Slightly corrosive. Over exposure may result in severe mucous membrane irritation & bronchitis. Hexavalent chromium is reported to cause respiratory sensitisation, however due to the trace amount present; a hazard is not anticipated under normal conditions of use.

Eyes: Corrosive. See also Section 7. Severe irritant upon contact with powder/ dust. Over exposure may result in pain, redness, corneal burns and ulceration with possible permanent damage.

Skin contact: Slightly corrosive. See also Section 7. Prolonged and repeated contact with powder or wetted form may result in skin rash, dermatitis and sensitisation. However, the chromate in this product has been reduced. It is believed that sensitization due to chromate within the stated shelf life is unlikely.

Ingestion: Slightly corrosive. Ingestion may result in burns to the mouth and throat, with vomiting and abdominal pain. Due to product form, ingestion is not considered a likely exposure route.

Toxicity Data: Experimental/calculated data for product:

LD50 (oral): > 5000 mg/kg
No systemic toxicity

Data for raw materials only:

Silica, Crystalline - Quartz (14808-60-7)
Carcinogenicity: Classified as a human carcinogen (IARC Group 1)

Hexavalent Chromium (Contaminant) (Not Available)
Carcinogenicity: Confirmed human carcinogen (IARC Group 1)
Health Surveillance: Required [NOHSC:1005(1994)]

12. ECOLOGICAL INFORMATION

Ecotoxicity: Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

The product gives rise to pH shifts.

Aquatic invertebrates:

LC50 (48h) > 100 mg/l, Daphnia magna (static).

Aquatic plants:

EC50 (96h) > 100 mg/l (growth rate), Selenastrum capricornutum (static).

Soil living organisms:

LC50 (10d) 9,931 mg/kg, other soil dwelling arthropod.

Persistence and degradability: Assessment biodegradation and elimination (H2O):

Inorganic product which cannot be eliminated from water by biological purification processes. The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.

Bioaccumulation potential: Assessment bioaccumulation potential:

The product will not be readily bioavailable due to its consistency and insolubility in water.

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:	6.3A, 6.9, 8.3A
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.

Cement Contact Dermatitis: Individuals using wet cement, mortar, grout or concrete could be at risk of developing cement contact dermatitis. Symptoms of exposure include itchy, tender, swollen, hot, cracked or blistering skin with the potential for sensitisation. The dermatitis is due to the presence in the cement, of soluble hexavalent chromium. However, the chromate in this product has been reduced. It is believed that sensitization due to chromate within the stated shelf life is unlikely.

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.