

DATE: 11 June 2003

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MATERIAL SAFETY DATA SHEET
cemlite® HE

(I) PRODUCT IDENTIFICATION AND COMPOSITION:

Product Name: cemlite® HE
Description: Lightweight but very strong, highly adhesive, thermally and acoustically insulating acrylic render (trowel applied 'plastering compound) and Drywall dry-mix compound for walls). Moulding/sculpturing compound and applied internal floor/exterior pavement topping dry mix compound
Chemical Name(s): Aluminium silicate, aluminium oxide and calcium aluminates
CAS No: 1327-36-2,1344-28-1 and 65997-16-2
Components contribution to hazard classification A1/115/EEC: None
Chemical Formula: CaO Al₂O₃, 12CaO 7Al₂O₃, CaO 2Al₂O₃, Al₂O₃
Emergency Telephone No: (03) 9457 6488 Fax: (03) 9458 4683
Email: service@abilityproducts.com.au

(II) HAZARDS IDENTIFICATION:

Most Important Hazards: In contact with water, an alkaline solution occurs (pH 10-11.5). In spite of the pH level, the alkaline reserve is limited and special tests have confirmed its non-irritant properties according to criteria defined in the EEC directives (93/21/EEC).
A dust problem may occur in confined areas. It is regarded as nuisance dust without any known specific effects to health. Avoid making excess dust during use. Avoid electrical/other sparks and static electrical discharges.

Components: Hydraulic binder preparations based on fused or sintered calcium aluminate clinker, aluminium oxide and filled mainly with strong white, hollow ceramic microspheres consisting essentially of amorphous aluminosilicate). The major chemical constituents are Al₂O₃, CaO and SiO₂ appearing predominantly in the above mineralogical compounds (see Chemical Formula above). Binders do not contain free lime or finely divided free crystalline silica (such as quartz, tridymite or cristobalite) in measurable amounts.

Specific Hazards: The binders react chemically and set and harden when mixed with water. The reaction is exothermic resulting in a temperature rise. *In large quantities the temperature of the mixture may increase enough to cause a risk of burns.*

Hazardous Nature Statement: Not classified as hazardous according to Worksafe Australia.
Dangerous Goods Class: None allocated
Hazchem Code: None allocated
Poisons Schedule No: None allocated

(III) PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: White powder
Use: Two pack chemically activating, but one step process material (simply mix thoroughly with the *specified* low amount of clean drinkable water) to produce a relatively fast setting, high early strength, high ultimate strength, *load-bearing*, lightweight, fire retardant, durable and insulative, advanced composite material having high resistance to chemicals. (See relevant printed information data – available upon request)

Colour: White
Odour: Odourless
Flash Point: Not applicable
Melting Point: 1680°C - 1750°C
Explosion properties: Not applicable
Boiling Point: Not applicable
pH Value: 10.5-11.5 (10% dispersion in water)
Solubility in Water: 700-900 kg/m³

(IV) FIRE & EXPLOSION DATA:

Flash Point:	Not applicable.
Flammability Properties:	Not applicable.
Extinguishing Media:	Use extinguishing agents that are suitable to surrounding fire.
Explosive Properties:	Dust may form on explosive mixture in air. Avoid making excess dust – especially in confined areas during the required blending of the product into the water proportion. Avoid electrical sparks, changes in static electricity, leaking gas and naked flames. Do not use in confined areas with little air ventilation.
Suitable Extinguishing Media:	Water spray, dry powder, foam or carbon dioxide (CO ₂).
Special Fire Fighting Procedures/Unusual Fire Explosion Hazards:	<p>Although non-flammable, Fire Fighters should be equipped with self-contained breathing apparatus due to dust which is regarded as a nuisance.</p> <p>There is a risk of burns when large amounts of product comes into contact with the recommended proportion of water. This product is not flammable and will not support flame. It does not promote combustion with other materials. When set and hardened, it is fire retardant.</p>

(V) HUMAN HEALTH DATA:

Primary Route(s) of Exposure:	Eye and skin contact, inhalation
Human Effects and Symptoms or Over exposure acute:	Excessive exposure to airborne dust may reduce visibility and/or cause unpleasant deposits in the eyes, ears and nose.
Chronic Medical Condition Aggravated by Exposure:	No chronic Health effects are known.
Carcinogenicity:	Not known
Exposure Limits:	Not known

(VI) EMERGENCY AND FIRST AID PROCEDURES:

Eye Contact:	Flush eyes with plenty of clean drinkable water for 15 minutes. Consult physician if any irritation persists.
Skin Contact:	Remove contaminated clothing and wash affected area with soap and plenty of clean water.
Inhalation:	Remove from dusty area to fresh air. Consult physician if any irritation persists.
Ingestion:	Wash out mouth with drinkable water and give plenty of water to drink. Consult physician if any irritation persists.

(VII) EMPLOYEE/OPERATOR PROTECTION RECOMMENDATIONS:

Eye Protection:	Wear suitable approved industrial safety spectacles as minimum protection or preferably safety goggles
Hand Protection:	Wear suitable protective gloves during handling/working
Skin & Body Protection:	Wear suitable protective clothing and boots
Respiratory Protection:	Wear suitable face mask (AS/NZ Standard 1715)
Ventilation:	It is recommended to maintain the air level below an exposure limit of 3.5mg/m ³ . In case of insufficient air ventilation wear suitable respiratory equipment.
Engineering Measures to Reduce Exposure:	Ensure supply of adequate ventilation especially in a confined area.
Hygiene Measures:	Wash skin thoroughly after handling and preferably shower or bathe at the end of the working shift. Wash work clothes regularly and separately from other clothes.

(VIII) REACTIVITY DATA:

Stability:	Stable in a dry and low humidity environment.
Conditions to avoid Polymerisation:	Does not occur.
Incompatibility with Other Materials:	Contact with water in all forms during storage will hydrate the product which will cause lumps and affect the product's performance. The product reacts chemically when mixed with water and will harden forming stable calcium aluminate hydrates. This reaction is exothermic and continues for up to 24 hours. Total heat released is ≤ 500kJ/kg.
Hazardous Decomposition Product:	None under normal processing.

(IX) SPILL OR LEAK PROCEDURES:

Steps to be taken in case the material is released or spilled:

For large amounts preferably use dry methods while avoiding dust exposure. Scoop material into an appropriately marked container for approved disposal without creating dust.

Waste Disposal Method:

Landfill in accordance with local, State or Federal environmental control regulation(s). Although virtually harmless it is imperative not to let product enter drains.

RCRA Status:

None.

(X) SPECIAL PRECAUTIONS & STORAGE DATA:

Storage Temperature

(Min/Max.): Ambient/Ambient

Average Shelf life: Virtually unlimited in dry, cool storage areas off the ground

Special Sensitivity: None

Precautions to be taken in

Handling and Storage:

Store in dry conditions, preferably above ground protected by shrink wrapping or in bulk silo, or store in original containers or packages away from foodstuffs. Avoid creating and breathing dust. Avoid contact with eyes and skin and wash after handling. Use personal protective equipment. Take precautionary measures against static electrical discharges. Avoid dust formation.

(XI) SHIPPING AND TRANSPORT DATA:

Technical Shipping name: cemlite® HE

Proper Shipping name: Calcium aluminates, aluminium oxide and aluminium silicate

UN No: Not classified as dangerous cargo.

Class: None

(XII) TOXICOLOGICAL INFORMATION:

Acute Toxicity: None

Local Effects: May cause local irritation to eyes, throat or skin but does not qualify as irritant according to EEC legislation

Sensitisation: Experience indicates that no unusual dermatitis hazard occurs from routine handling.

Long Term Toxicity: None

Chronic Toxicity: Does not contain measurable amounts of soluble Chromium (VI) potentially causing allergic skin eczema or cancer.

(XIII) ECOLOGICAL INFORMATION:

Mobility: After hydration - the chemical combination that takes place when it is mixed with water (a few hours or days in moist and/or high humidity air conditions) the product is stable in soil and in water with a negligible mobility of its constituents.

Persistence/Degradability: No information available

Bioaccumulation: “ “ “

Ecotoxicity: “ “ “

CONTACT:

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