

**Health & Safety data sheets**  
June 2015

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**1. Identification of the preparations and company.**

**Product details:** Crystalline Waterproofing Admix  
**Trade names:** ARDEX WPM 422  
**Supplier:** ARDEX SINGAPORE PTE. LTD.  
26 Tuas Avenue 4 Singapore 639376  
Tel: + 65 6861 7700 Fax: + 65 6862 3381

**2. Composition/information on ingredients.**

INGREDIENTS	Name	CAS Number	Proportion(%)
	Portland Cement	65997-15-1	10 – 40%
	Alkaline Earth Compound	1317-65-3	10 – 50%
	Silica Sand (graded)	14808-60-7	<25%
	Microsilica	69012-64-2	3 – 10%

**3. Hazard identification.**

**Physical Form:** Light grey powder  
**Odour:** None.  
**Primary Entry Routes:** Inhalation, ingestion, skin contact, eye contact.  
**Target Organs or Systems:** Contains material which may cause damage to upper respiratory tract, mucous membranes, eyes, nose, sinus.

**Signs and Symptoms of Exposure (Acute Effects):**

**Inhalation:** Cough, sore throat.  
**Ingestion:** Burning sensation.  
**Skin Contact:** Dry skin, redness.  
**Eye Contact:** Redness, burning sensation.

**Signs and Symptoms of Exposure (Chronic Effects):** Repeated or prolonged contact with skin may cause dermatitis.

Repeated or prolonged contact may cause skin sensitization.

**Aggravation of Pre-Existing Conditions:** Pre-existing conditions involving any of the above mentioned target organs or systems may be aggravated by this product.

**Hazard description:** Irritant.



**Precautionary Statements:**

Do not breathe dust.  
Avoid contact with skin and eyes.  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
After contact with skin, wash immediately with plenty of water.  
Wear suitable protective clothing, gloves and goggles.



#### 4. First aid measures.

- Eye contact:** Quickly remove any dry powder with a brush  
Irrigate with large amounts of water for at least 15-20 minutes.  
Seek immediate medical attention.
- Skin Contact:** Continuously flush with water for at least 15-20 minutes. Remove contaminated clothing and wash before reuse or discard. If symptoms develop seek immediate medical attention.
- Inhalation:** Remove person to fresh air and seek immediate medical attention.
- Oral ingestion:** Wash out mouth with water and drink one cup (240-300ml) of water followed by diluted milk if available. Do not induce vomiting. Never give anything by mouth if victim is rapidly losing consciousness, is unconscious or convulsing. Seek immediate medical attention.

#### 5. Fire-fighting measures.

- Extinguishing Media:** Not applicable-Product is non-combustible.
- Specific Hazards:** In contact with extinguishing water, an alkaline solution is produced which can cause irritation.
- Precautions for Fire-** Fire fighters must wear NIOSH-approved positive pressure self-contained breathing apparatus with full-face mask and full protective clothing.

#### 6. Accidental release measures.

- Emergency Procedures:** Prevent spillage from entering sewer drains.

#### Methods and materials for containment and clean up:

Use dry clean up procedures and avoid generating dust. Increase ventilation and wear full protective clothing and sufficient respiratory protection. Vacuum device or shovel suitable for cleanup. Place waste material in plastic or metal drums with tightly sealed lids for disposal.

#### 7. Handling and Storage.

- Handling:** Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs. Use in well ventilated area and avoid contact with incompatible materials.
- Storage:** Product should be stored in dry, moderate environment, and protected from water or cold damage. Store away from foodstuff containers. Keep in sealed containers until product is required.

#### 8. Exposure controls/personal protection.

##### Exposure standards:

TWA 10 mg/m<sup>3</sup> Portland Cement Total Dust TLV – TWA 5 mg/m<sup>3</sup> Alkaline Earth  
Compound TLV – TWA 0.1 mg/m<sup>3</sup> (respirable) Recommendation: Keep exposure to dust as low as practicable, respirable crystalline silica should be kept below 0.1 mg/m<sup>3</sup> TWA.

##### Other information

Cement products may contain crystalline silica as an impurity. Authority has yet to classify crystalline silica as a human carcinogen. Repeated exposure to crystalline silica dust may lead to silicosis, a serious lung disease. The onset of silicosis is usually slow and lung damage may occur even when no symptoms or signs of ill health have occurred. Exposure to respirable crystalline silica dust contained in the product must be prevented to avoid risk of lung disease.

**Engineering Controls:** Use in well ventilated areas. Maintain air concentrations below exposure standards.

##### Personal Protective

It is recommended that the user wear rubber gloves, a class P1 or P2 particulate respirator or equivalent dust mask, fitted correctly, tight fitting safety goggles, and impervious full length clothing that protects the skin from contact.

Additional safety precautions may include, eyewash station, shower facility, and ventilation sufficient in volume and distribution to maintain dust exposure below the 10 mg/m<sup>3</sup> level.

#### 9. Physical and chemical properties.

- Physical State:** Solid
- Odour and appearance:** Odourless grey colour
- PH Value:** 10-13
- Specific Gravity:** 2.5 –3.0
- Boiling/melting point:** >1200°C



HIGH PERFORMANCE  
TILING AND FLOORING PRODUCTS

**Vapour pressure:** Not applicable  
**Vapour density:** Not applicable  
**Solubility:** 2.0g/L  
**VOC Content:** None  
**Flash Point:** Not applicable  
**Flammability:** Not applicable  
**Other properties:** Non explosive

#### 10. Stability and reactivity.

**Chemical Stability:** Products are chemically stable.  
**Conditions to Avoid:** Avoid exposure without appropriate protective work clothing and dustmasks. Protect from water and cold damage.  
**Incompatible Materials:** Products are incompatible with strong acids.  
**Hazardous Decomposition:** Under normal storage and use conditions neither hazardous decomposition nor polymerization should occur.  
**Hazardous Reactions:** When mixed with water, products produce an alkaline solution which can cause skin irritation.

#### 11. Toxicological information.

##### Acute Toxicity:

PRODUCT / INGREDIENT NAME	RESULT	SPECIES	DOSE	EXPOSURE
Alkaline Earth Metals	LD50 Oral	Rat	7340 mg/kg	-

**Carcinogenicity:** Not Available

#### 12. Ecological information.

**Environmental Effects:** No known significant effects.  
**Ecotoxicity:** Not Available.  
**Degradability:** Not Available.  
**Bioaccumulation:** Not Available.  
**Mobility:** Not Available.  
**Ecotoxicity:** Not available

#### 13. Disposal considerations.

**Disposal Procedures:** Can be disposed of as common waste. Disposal should be in accordance with local, state and federal regulations.

##### Special precautions

For landfill and Incineration: Non required

#### 14. Transport information.

Not classified as Dangerous Goods by Road and Rail.

**UN Number:** Non allocated  
**UN Proper shipping name:** Non allocated  
**Class and subsidiary risk:** Not applicable  
**Packing Group:** Not applicable  
**Special precautions for user:** No restrictions known for transport procedures.  
**Hazchem Code:** None allocated

#### 15. Regulatory information.

**Poisons schedule:** None allocated  
**Hazard Category:** Irritant.

#### 16. Other information.

The information herein refers only to the materials listed. It does not relate to the use of these materials in combination with any other materials or applications for which the product is not intended. The information included is accurate and reliable as of the most recent revision date of this SDS.