



AEROCRETE cc.

Reg. No. CK 98 54010/23 VAT 4810178006

Manufacturer of chemical foam cement and specialised grouts

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AERO SEAL TECHNICAL DATA SHEET

DESCRIPTION

Aero Seal is a dustless, cementitious, thin skin liner that is supplied in a single package comprising a mix of both the cementitious and polymer ingredients. It is spray-applied and has to be mixed with water on site.

ADVANTAGES

- The dustless element of **Aero Seal** provides a huge advantage to the surrounding environment of the mine/tunnel as well as the health and safety of people using the product or working within the vicinity of the product.
- Non flammable
- Non toxic
- Fast setting – early strength gains
- High flexural strength properties
- Forms a flexible barrier
- Good tensile bond strength (when applied to most substrates)
- Can be sprayed/trowel applied
- **Aero Seal** is supplied as a pre-mixed bag – this is far more convenient and eliminates potential errors in the mixing, such as under mixing.

PHYSICAL AND CHEMICAL PROPERTIES

• Physical state (20°C)	Powder
• Colours:	White/Grey/Super white
• Specific gravity (20°C)	2.80
• pH:	Alkaline
• Final setting time:	3 hours(@25°C)
• Application thickness:	2mm – 8mm
• Application temperature:	5°C - 35°C
• Flammability (DIN 4102 – B2):	Self extinguishing

APPLICATION GUIDELINES

Uses

- Soil stabilisation in tunnelling works
- Reinforcement protection barrier against rock strain movements
- Temporary surface support preparation for shotcreting
- Stabilisation of areas prone to soil movements
- Protection barrier against weathering and soil erosion
- Prevent rock from oxidising

SURFACE PREPERATION

Remove loose rocks and debris from the surface and ensure that the surface is sound. Soil conditions must be carefully studied and the appropriate system must be recommended by a qualified geotechnical engineer.

Aero Seal must be used under the supervision of a qualified person.

Depending on the soil conditions – other support measures to supplement and further strengthen the soil (eg rock anchors or sprayed concrete) may be required.

MIXING

Add between 4.5 litres and 5.5 litres of water to a 25kg bag of **Aero Seal**. Mix thoroughly with a mechanical mixer for 2 - 3 minutes until the desired homogenous mortar paste is achieved. Ensure that the mix is free from lumps before use.

PLACEMENT

Spray the product onto the substrate to the thickness required. Coverage guideline is 16m² per bag per mm of thickness. The actual coverage rate depends on the substrate condition. (1 bag can achieve 3m³ at 4 – 5 mm thickness)

CLEANING EQUIPMENT

All of the equipment can be cleaned by blowing compressed air through the system. The nozzle itself should be inspected and cleaned out with water after every break in the spraying process. During continuous applications there is no need for the nozzle cleaning as long as the water and the air supply is sufficient and correctly adjusted.

STORAGE

- Aero Seal is guaranteed for 12 months starting from the manufacturing date provided no other chemicals are added to it.
- The product should be stored in a dry place – free from any contact with moisture and sunshine.
- It can be stored in temperatures between 5°C and 35°C.

PACKAGING

25kg bags

HEALTH AND SAFETY

This product is classified as harmless. Aero Seal will provide onsite assistance when requested. Refer to the material safety data sheet.