

AeroShield 180 T15

Liquid insulation coating

Product Description

AeroShield 180 T15 liquid insulation is the best in its class providing superior performance against other liquid insulation products on the market today. It improves efficiency and reduces energy costs with a low thermal conductivity of only 0.032 W/mK, its performance is equivalent to most conventional insulation products but with the added benefit that it does not take up moisture. It provides personal protection to the ASTM 1057 skin touch test.

The coating acts as a thermal barrier, protecting interior temperatures against cold, hot, and humid exterior temperatures. The coating system allows for visual inspection and makes any future maintenance easy to identify.

Typical Use

As a liquid applied insulation, a direct replacement for conventional insulation on hot process piping, steam lines, storage tanks, heat exchangers, pressure vessels, valves, boilers, HVAC, vats, and many more uses.

Technical Data

Volume Solids

84 %+ /- 2%

Colour

White / Light Gray

Specific Gravity

Approx. 0, 50 kg/L

Thermal conductivity

0.032 W/mK

Dry Temperature Resistance

180°C continuous 204°C Maximum short term

Packaging

25 Lt Steel pails

Solvent

Water

Finish

Eggshell (Textured)

VOC

<5 grams per Litre

Number of Coats

Unlimited

Theoretical Coverage Rate

0.84 sq metres per litre @1mm

Drying @ 20°C 65% relative humidity

Skin formation approx 40 mins

Minimum thickness

3mm per coat

Maximum thickness

4mm per coat up to 30mm without re-enforcement

Water vapour transmission rate

Approx 25 g/m²/day

sd-value (diffusion equivalent air layer thickness)

Approx 0.76

Coating System

Primers

Steel and stainless steel PolyMerC CUI 650
Non- Ferrous AquaPrime UV
Concrete SealPrime CT

Top Coats

AquaCoat TC, PollyU TC

Surface Preparation

Blast cleaning

The performance of this paint will depend on the degree of surface preparation. All surfaces should be clean, dry and free from contamination. Surfaces should be treated in accordance with ISO 8504:2000. The surfaces shall be blast cleaned to min. Sa 2, preferably Sa 2½ (ISO 8501-1:2007). The surface profile and the anchor pattern shall be between 40 µm and 70 µm. The abrasives shall be free from oil, grease, moisture, chloride contamination etc.

Power tool Cleaning

The performance of AeroShield 180 T15 will depend on the degree of surface preparation. Surfaces should be treated in accordance with ISO 8504:2000. The surface shall be cleaned by high pressure steam/detergent cleaning to remove dirt, grease and/or salt deposits in accordance with SSPC SP1. Power-tool cleaning to min. St 2, preferably St 3 (ISO 8501-1:2007). Care shall be taken to ensure that power-tool cleaning does not polish the steel surface. If the surface being prepared lies adjacent to a coated surface, the power tool cleaning shall overlap the coated surface by at least 25 mm and the coated surface shall be feathered back

Previously Painted Surfaces

All surfaces should be clean, dry and free from contamination. Surfaces should be treated in accordance with ISO 8504:2000. Ensure compatibility of the coated substrates with the selected paint system. If the remaining part of the existing coating system needs to be sweep-blasted, fine abrasive shall be used to avoid damage to the coating system. When recoating aged coated substrates ensure that the existing coatings will operate at the required temperature

Application conditions

The surface temperature must be a minimum of 3° above the dew point. Do not apply to substrates at temperatures below 10°C. When applying AeroShield 180 T 15 to hot steel up to 150°C, thin multiple passes maybe required to prevent blistering, provide adequate ventilation during application and drying. The temperature of the paint should be at least 15°C

Mixing

AeroShield 180 T15 is a single component coating. The coating needs to be stirred with a mixing paddle on slow speed in reverse mode.

Application Equipment

Double Diaphragm pumps are ideal for delivering material to the spray gun. The material feed hose should have a three quarter inch (3/4") diameter minimum ID. Recommended spray gun is the Graco Texture Model 248094 with fine finish kit or equivalent. Other spray equipment may not be suitable

Pressure pot with a three quarter inch (3/4") diameter minimum ID. bottom out let and textured spray gun with a minimum tip size of 3mm minimum pressure should be 4 bar

Hopper-fed hand held texture spray equipment is suitable for small projects and touch up.

A trowel can be used to repair small areas that may have been damaged.

Pot Life

Mix only 1 container at a time, just before the material is to be applied. If less than 1 container is needed for a project, pour out the required amount after mixing and then immediately re-seal the original container.

Clean-up

Clean up immediately after use with fresh clean water. Discard clean up material according to local environmental regulations.

Precautions

This product is for use only by professional applicators in accordance with information in this Technical Data Sheet and the Safety Data Sheet (SDS). Refer to this product's SDS before using this material.

Material Storage

Store all coating materials in a dry place as close to room temperature as possible. Ideal storage temperature should be between 10°C to 27°C. Keep cans sealed and out of direct sun light when not use. Warm up cold material to room temperature before using. Do not allow the coating to freeze.