

Product Data Sheet

CasTech Bond Acrylic

Nov-2025, Ver. 01.01



Acrylic Polymer Based Bonding Agent

DESCRIPTION

CasTech Bond Acrylic is an acrylic polymer latex bonding agent, curing agent and admixture for cementitious mortars, screeds, structural repair mortars and concrete. When used as an admixture, it increases abrasion, flexural, impact and crack resistance.

STANDARDS

ASTM C 1059 Type II, ASTM C 932.

TYPICAL USES

- Bonding agent for high strength repair mortar
- Primer to improve adhesion of structural repair and fairing coat mortars
- Curing agent to prevent loss of water from applied repair mortar
- Bonding agent for new concrete to old concrete
- Bonding agent for GRC mixes
- Concrete additive for floor restoration
- Bonding agent for gypsum based substrates

ADVANTAGES

Key advantages:

- Single component
- Excellent water resistance
- Increased flexural strength and better durability
- Improved cohesiveness when used as an admixture
- Excellent adhesion to concrete, repair mortar, screeds, stonework, plaster etc.
- Increased abrasion resistance
- Reduces permeability of the mortar
- Improved corrosion protection
- Non-toxic

TYPICAL PROPERTIES

Appearance	Milky White Liquid
Specific Gravity (ASTM D 1475)	1.02 ± 0.02
Compressive Strength (ASTM C 109)	10 – 15% increase over control
Flexural Strength (ASTM C 580)	5 – 10% increase over control
Tensile Strength (ASTM C 307)	5 – 10% increase over control
Tensile Bond Strength (ASTM C 932)	> 1.0 N/mm ² at 28 days
Slant Shear Bond Strength (ASTM C 1042)	> 8.6 N/mm ²

SURFACE PREPARATION

The surface should be clean, free from standing water and all contaminants such as oil, grease, laitance, paint and corrosion. Any contamination should be removed by mechanical means to produce a sound substrate. Wash the surface with clean water and remove all dust. Concrete surfaces should be thoroughly soaked prior to application to ensure a saturated surface dry condition.

MIXING

As a bonding slurry coat: mix **CasTech Bond Acrylic** with clean water and cement in the ratio 1:1:1 by weight, using a slow speed drill fitted with a paddle.

As an additive: dry blend cement, fine aggregate and coarse aggregate (if required) in a forced action mixer for 2 – 3 minutes. Mix **CasTech Bond Acrylic** with water in 1:1 proportion and add to the dry blend to obtain a uniform, smooth consistency repair mortar/screed.

APPLICATION

As a neat bonding agent: apply **CasTech Bond Acrylic** directly on the substrate by brush, roller or spray. Apply evenly and avoid ponding.

As a bonding slurry coat: apply the slurry to the saturated substrate at 1 – 2 mm thickness and place new repair mortar/concrete immediately, before the slurry dries.

As a mortar/topping/render additive: modified mortars, toppings and renders must be well compacted onto the primed surface by trowel. Exposed steel reinforcement should be completely encapsulated by the mortar.

CURING

All cementitious materials modified with **CasTech Bond Acrylic** should be cured with mist water spray, moist curing with wet hessian, or the CasTech Cure range of curing compounds.

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COVERAGE

As a neat bonding agent: 5 – 7 m²/litre/coat; actual coverage depends on texture and porosity of the substrate. As an additive for tile adhesives, bedding mortars, sand-cement renders, plasters and screeds, the dosage may vary from 10 – 20% by weight of cement.

LIMITATIONS

CasTech Bond Acrylic should not be used as a curing compound where the surface is to be coated with epoxy or polyurethane coatings.

PACKAGING

5 litre, 20 litre and 200 litre containers.

STORAGE AND SHELF LIFE

12 months from date of manufacture when stored under warehouse conditions in original unopened packing. Extreme temperature/humidity may reduce shelf life.

EQUIPMENT CLEANING

Clean all equipment and tools with water immediately after use. Hardened material can be removed mechanically.

HEALTH AND SAFETY

PPE: Suitable protective goggles, gloves and mask must be worn.

Precautions: In case of contact with eyes, rinse immediately with plenty of water; in case of contact with skin, wash off immediately with soap and water. If swallowed, seek medical attention immediately.

Hazard: Regarded as non-hazardous for transportation.

Disposal: Do not reuse containers. Dispose of as per local rules and regulations.

Additional information: Refer to MSDS (available on request).

TECHNICAL SUPPORT

CasTech provides on-site assistance and consulting services on projects when requested. Technical data sheets on other CasTech products and guidance on their use are available on request.

CasTech MIDDLE EAST FZE

T6-04, Sharjah Airport Free Zone, Sharjah, UAE

P.O. Box: 121661 Tel.: +971-6-5489207

Fax: +971-6-5579879 Email: info@castechchem.com