



## Arina-adhesive SEA 225

### Structural epoxy adhesive for saturating and impregnating fabrics type fibers

#### Introduction:

**Arina-adhesive SEA 225** is two-component, high strength, solvent free, low viscosity epoxy based adhesive used for saturating all fabric type fibers, and priming concrete surface in FRP applications. It is also suitable to be used for wet lay-up method.

#### Where to use:

**Arina-adhesive SEA 225** is a high modulus and high strength impregnating epoxy based adhesive which provides excellent bonding to many construction materials. It is shrinkage compensated and can be used as:

- Saturating resin for all wraps and fabric type fibers.
- Sealing concrete surfaces.
- Bonding agent for epoxy putty and repair mortars on dry concrete surfaces.
- General purpose adhesive for a variety of applications.

#### Technical information:

Appearance	Milky liquid (mixed) Comp. "A": Transparent liquid Comp. "B" : Amber liquid
Mixing ratio	A : B = 3 : 1 by weight
Specific gravity (at 25 °C)	1.115 kg/l (mixed)
Bonding strength	2.5 MPa
Tensile strength	50 MPa. (after 7 days)
Service temperature	-35 to +65 °C
Full cure	After 7 days (at 25 °C)
Working Time / Pot life	45 min. (25 °C)

#### Advantages:

- Excellent adhesion to concrete and most construction materials.
- Excellent early and final mechanical strengths.
- Excellent chemical resistance.
- Impact and shock resistance.
- High creep resistance under permanent loads.
- Good wetting properties and excellent saturating material for woven and nonwoven fibers.
- Low viscosity and high penetrating properties.
- Easy to mix.
- Low odor and safe to use.
- Shrinkage free while curing.
- Long pot life and open time.

#### Surface preparation:

The substrate must be sound and free of loose particles. Remove dust, laitance, oil, grease, curing compounds, waxes, disintegrated and other bond inhibiting materials from the surface. Surface can be prepared by blasting methods, grinding, or wire brushing. The surface defects, honeycombs, and spalls must be repaired with suitable repair mortars such as **Arina-patch GSP 245** , a mixture of **Arina-adhesive SEA 221** and quartz sand, or any other mortars recommended by designer to reduce consumption of adhesive.

Substrate should be dried before application. For wet surfaces use **Arina-primer LEP 231** as primer.



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**Mixing:**

Stir each component separately. Add component "B" to Component "A" and mix them thoroughly using a low speed drill (max. 400 rpm) fitted to the suitable paddle at least for 2 to 3 minutes or until a uniform color is obtained. For partial mixing, add 1 part of component "B" to 3 parts of component "A" by weight and mix them thoroughly. Mix only required quantity which can be used within the pot life.

**Application method:**

Sealing:

Use a brush, roller, or airless sprayer to apply mixed material in a uniform rate to saturate the surface but leaving no extra material on the surface.

Fabric saturation:

1. Cut fiber sheets into prescribed sizes using scissors or cutters.
2. Spread the cut fiber sheet on a flat surface. Use a Polyethylene sheet under fiber sheet to avoid wastage of adhesive.
3. Pour mixed adhesive on fiber sheet and distribute it slowly by a roller or rubber spatula.

The fiber should be strongly squeezed in the longitudinal direction of the fibers two or three times using a roller or a rubber spatula in order to impregnate adhesive into the fibers.

**Material consumption:**

As a sealer: 250 to 350 g/m<sup>2</sup>, depending on surface roughness.

As a fiber impregnating or saturating adhesive: 500 to 850 g/m<sup>2</sup>, depending on fiber sheet.

**Application limits:**

Do not apply *Arina-adhesive SEA 225* at temperatures less than +5 °C.

Do not thin *Arina-adhesive SEA 225* by solvent. Solvent will prevent proper curing.

Age of concrete must be 21~28 days, depending upon curing and drying conditions.

**Cleaning:**

Application tools and equipment should be cleaned after completion of each job or at break time. Uncured material can be cleaned with approved solvent. Cured material can only be removed mechanically.

**Storage / Shelf life:**

Store out of direct sunlight on pallet, and protect from extreme heat and rain fall. The shelf life for originally unopened package is 12 months from date of production.

**Packaging:**

*Arina-adhesive SEA 225* is available in 3.0 or 10.0 kg. Pails.

**Safety precautions:**

Product may cause skin irritation. Use personal safety devices such as gloves and goggles. If contacted with eyes or mucous membrane, wash immediately with plenty of warm water and seek medical attention.