

**PRODUCT****L.A. 2S**  
**Epoxy Liquid Adhesive 2S**  
**Epoxy Binder**  
**Corrosion protection of steel and concrete****DESCRIPTION**

L.A. 2S is a two-component, low-viscosity, solventless, liquid epoxy compound with an excellent adhesion to most known substrates in the construction industry such as concrete, steel, stone, marble, and wood.

L.A. 2S combines high strength with resiliency, will not shrink or become brittle.

L.A. 2S assures a perfect adhesion of freshly mixed concrete to existing one and water-proofs any treated area.

**USES**

- Binding of freshly mixed concrete, thin mortar or terrazzo toppings to existing concrete or metal.
- Coating PCC (Portland Cement Concrete), masonry, brick, etc...to provide a waterproof, abrasion and chemically resistant barrier even under high humidity conditions.
- Corrosion protection of steel.
- Preparation of anti-skid surfaces.
- Mixed with dry selected aggregates to form epoxy mortars for:
  - Patching spalls, pop-outs, floor toppings.
  - Fixing machine and stanchion bases, manhole frames and covers, ragbolts, pins, tie-beams, etc...
  - Rebuilding degraded joints in civil construction, bridge piles, canal locks, etc...
  - Embedding bolts, re-bars, dowels.

L.A. 2S based mortars, after 24 hours, meet and exceed the strength of a 28 days cured PCC.

Thanks to its unique formulation L.A. 2S alone can solve many problems on site.

**SPECIFICATION**

- Form:	Two packs to be mixed immediately before using
- Colour:	Concrete grey.
- Mixing ratio:	3 parts A to 1 part B by weight.
- Density:	$1,30 \pm 0,05 \text{ Kg/dm}^3$
- Solids content:	100%
- Viscosity:	10 – 12 Poises
- Pot-Life:	30 min.
- Touch dry:	8 hours
- Overcoating time:	6 - 24 hours depending on temperature.
- Full cure:	7 days
- Open time *:	90 mins
- Shore "D" Hardness	84
- Adhesive strength:	
mild steel to mild steel:	>22 MPa
concrete to concrete:	>3 MPa (100% concrete failure)
- Compressive strength:	>65 MPa
- Flexural strength:	>50 MPa



- Tensile strength:	>37 MPa
- Elastic modulus:	~6000 MPa
- Elongation to break:	4%
- Number of coats:	1-2
- Consumption:	First coat 250-300 g/sq.m. Second coat 250 g/sq.m.
- Film thickness:	About 400 microns

\* "Open time" is the maximum time available from start of mixing the adhesive to pouring new concrete.

#### Characteristics of L.A. 2S mixed 1:6 by weight (1 dm<sup>3</sup> mass) with graded sand

- Pot-life:	60 mins
- Solid contents:	100%
- Density:	2 Kg/dm <sup>3</sup>
- Flammability:	non-burning
- Full Cure:	7 days
- Compressive strength:	>65 MPa
- Flexural strength:	>30 MPa
- Tensile strength:	>20 MPa
- Elastic modulus:	~25000 MPa
- Application Temperature:	Not recommended when ambient and/or surface temperature are below +5°C and falling or exceeding 40°C
- Storage Life:	24 months (minimum) if stored in the original tightly sealed packs.
- Packing:	1 Kg and 5 Kg. units.

## CHEMICAL RESISTANCE

L.A. 2S has excellent chemical resistance to:

- Fresh, salty and demineralized waters.
- Anti-freeze liquids, oils, greases, gasolines, etc...
- Alkalies.
- Acids of medium concentration.

## HOW TO USE

### SURFACE PREPARATION

Surfaces must be sound and free from dirt, grease, old paint residues, loose materials, rust or other contaminants.

The recommended methods of cleaning are:

- Grit-blasting.
- High pressure water jetting.
- Mechanical brushing.

### MIXING

Check uniformity of each component and stir parts "A" and "B" separately.

Mix only the quantity of material that can be used before expiration of pot-life. For standard quantities, pour all of part "B" into can containing part "A". Mix thoroughly using a mechanical low speed mixer with a paint mixing paddle until material attains uniform consistency and colour. Carefully scrape the sides and bottom of the containers while mixing. Thorough mixing will take 3 to 5 minutes.

For smaller batches check uniformity of each component, stir parts "A" and "B" separately and thoroughly, measure the two components as specified on the label



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into a clean container and proceed as above. A perfect uniform mixing must be obtained.

When L.A.2S is used as anchoring adhesive/binder for installation of Carbon Laminates and Carbon Fibres it should be mixed with 4-12% of THK 2 (thickening agent) to control the workability

When L.A.2S is used to prepare epoxy mortar always mix Parts "A" and "B" together before adding the quartz sand (highly recommended whenever available). Quartz sand should always be dry and bagged. Using graded sands with low voids will require less binder for a given volume of mortar than the use of ungraded sands.

#### APPLICATION

L.A. 2S may be applied by airless sprayer, brush or roller.

Substrate should be primed with a coat of L.A. 2S before application of mortar. After thorough mixing, the mortar is applied evenly over the desired area by means of trowels or screeds. L.A. 2S coat should never be allowed to dry before subsequent treatment is applied. If it does, stipple surface with stiff brush, re-coat and proceed when L.A. 2S becomes tacky again.

#### CLEAN UP

Clean tools and equipment with "SOLVENT OMNIA" or toluene, or acetone.

#### HANDLING AND TOXICITY

"A" and "B" Component For Industrial Use Only!

Skin contact should be avoided by wearing impervious gloves (rubber or disposable polyethylene) and by using suitable goggles for eyes; barrier creams such as Kerodex K7 may also assist in offering additional protection. Any accidentally contaminated skin areas should be cleansed immediately with soap and water and/or a suitable resin removal cream. For eyes, clean with plenty of water and get medical attention immediately.

The use of solvents for skin cleansing should be avoided.

#### NOTES

**L.A. 2S is also available as L.A.2 S.G. (Summer Grade) offering same properties with adjusted pot-life for use in hot climate.**

All information and direction contained in this technical data sheet are given in good faith and are based on the best known practical tests.

SINIT, when having no control over transport, storage, handling, use and application of its product, will disclaim responsibilities for any unsatisfactory results obtained.

All tests have been carried out at 23°C.

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These data supersede all previously published data.

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