PRODUCT

P. A. 103
Epoxy Paste Adhesive 103

DESCRIPTION

P.A. 103 is a two-component, 100% solids, buttery, thixotropic, multi-purpose epoxy paste adhesive with an excellent adhesion to most known substrate surfaces in the construction industry such as concrete, metal, stone, marble, and wood.
P.A. 103 combines high strength with resiliency, it will not shrink or become brittle and has been specially modified to be used also in presence of moisture.
P.A. 103 waterproofs the surfaces and is resistant to corrosion and abrasion.

USES

- Bonding precast concrete elements, steel-to-concrete, wood-to-concrete.
- Patching horizontal, vertical or overhead spalls in concrete.
- Embedding bolts, re-bars, dowels.
- Setting injection tees and sealing cracks.
- Filling honeycomb areas and voids
- Mixed with 1 - 2 parts of quartz sand to form non-sag mortars.

SPECIFICATION

- Form:	Two packs to be mixed immediately before using
- Colour:	Concrete grey.
- Mixing ratio:	70 parts A to 30 parts B by weight.
- Density:	1,5 ± 0,05 Kg/dm^3
- Solids content:	100%
- Pot Life:	30 mins.
- Touch dry	8 hours
- Full cure:	7 days
- Open time*:	60 mins.
- Shore "D" Hardness:	82
- Adhesive strength:	
mild steel to mild steel	>3,5 MPa
concrete to concrete	>2,0 MPa (100%concrete failure)
- Bolt pull-out strength: (ASHTOT – 237)	10 mm. diameter threaded steel bolt,102 mm. embedment in 13 mm. diameter hole in concrete: Bolt failure at 544 MPa. load.
- Compressive strength:	>55 MPa
- Elongation to break	2%
- Application Temperature	Not recommended when ambient and/or surface temperature is below 3°C and falling or exceeding 40°C.
- Storage life:	18 months (minimum) if stored in the original, tightly sealed packs.
- Packing:	2 Kg. and 5 Kg. Units

* "Open time" is the maximum time available from start of mixing the adhesive to placement of the new element to be bonded.

CHEMICAL RESISTANCE

P.A. 103 has good chemical resistance to:

- Fresh, salt and demineralized waters.
- Anti-freeze liquids, oils, greases, gasolines, etc.
- Alkalis.
- 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". For smaller batches check uniformity of each component, stir single parts "A" and "B" separately and thoroughly, measure the two components as specified on the packs into a clean container, mix thoroughly using a mechanical low speed mixer and a paint mixing paddle until material attains uniform consistency and colour. Carefully scrape the sides and bottom of the containers while mixing. Through mixing will take 3 to 5 minutes.
When making epoxy mortars always mix parts "A" and "B" together before adding the quartz aggregates. Aggregates must be dry. Typical density of a mortar made by 1 part by weight of P.A. 103 and 1 part by weight of dry quartz sand is 1.85 Kg/dm^3.

APPLICATION

Apply P.A. 103 by spatula, trowel or fibre brush, using rubber gloves.
Matching surfaces of elements to be bonded must be carefully spreaded in advance with P.A 103.

CLEAN UP

Clean all tools and equipment immediately after use 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 affording 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

NOTE

P.A. 103 is also available as P.A. 103 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 test.
SINIT, when having no control over transport, storage, handling, use and application of its product, will disclaim all responsibilities for any unsatisfactory results obtained.

All tests have been carried out at 23°C.

Revised: January 2002.

These data supersede all previously published data.