



## DESCRIPTION

APSECOL RESIN is a solvent-free, two-component epoxy resin adhesive with excellent adhesion characteristics, even on slightly damp surfaces.

## FIELDS OF USE.

The main fields of use are:

- Adhesion bridge between hardened concrete, masonry, etc., and fresh concrete or plaster (shotcrete);
- Bonding bridge between coatings or plasters on very smooth concrete surfaces;
- Bonding of natural stones, recomposed materials, provided they are not subject to deformation;
- APSECOL RESIN can be used on metal after preparation and application of METALPRIMER.

## CONSUMPTION

Average consumption 300-800 g/m<sup>2</sup> may vary depending on the flatness of the substrate and the type of preparation.

## PACKAGING

### Resin (A+B)

- Comp. A: bucket of 16 (or 10 kg)
- Comp. B: 8 tin (or 5 kg)

### Mortar (A+B+C)

- Comp. A: 1 kg bucket
- Comp. B: 0.5 kg tin
- Comp. C: 8.5 kg tin

## CERTIFICATIONS

APSECOL RESIN complies with UNI EN 1504-4: Structural Bonding (DoP No. 473).  
ISO 9001 certified quality management system (Certificate No. IT.17.0227.01.QMS).  
APSE S.r.l. is an active member of CONPAVIPER.



## ADVANTAGES

- Fluid and easy to apply;
- High adhesive and bonding strength;
- Possesses excellent toughness properties after curing; Resists impact and vegetable and mineral oils;
- Its mechanical properties, after curing, are not affected by outside temperatures;
- Operating temperature from -25°C to +80°C;
- With the addition of mineral fillers, it becomes excellent for grouting of anchor bolts and filling of holes.

## SURFACE PREPARATION

As a general rule, cementitious substrates must be milled and/or shotblasted, clean of dust, oils and grease, free of friable and inconsistent parts or not perfectly anchored. In the case of dusty surfaces, it is recommended to wash and vacuum the surface beforehand. Then impregnate the substrate with APSECOL RESIN diluted approx. 1:0.5. For extremely porous surfaces, dilute to a maximum of 1:1 with DILUEPOX. Allow the product to cure (minimum 12 hours at +25°C) and then apply the adhesive layer with APSECOL RESIN in the quantities indicated. The base must be stable, without cracks and have already completed the hygrometric curing shrinkage.

## PRODUCT PREPARATION.

APSECOL RESIN is supplied in premeasured packages. Pour component B into component A and mix until completely homogenized.

## MIXTURE APPLICATION

APSECOL RESIN is applied and spread on the substrate with a roller or brush, or airless spray in a homogeneous, well-covering layer with an average consumption of 500 g/sqm, which may vary depending on the roughness of the substrate. For resurfacing, fresh concrete and plaster must be set and compacted as soon as possible. In any case before the adhesive hardens (usually within 4 hours at 20°C). For grouting and filling, make a mortar of APSECOL RESIN with added hard aggregates (STARQUARZ) in the ratio A+B+C=1+0.5+8.5 kg. Pour the mix directly into the seat, onto the parts to be filled or brought back to height. For vertical bonding, the bonded surfaces should be held until hardened. In case of airless spray application (26:1), dilute the product with 5-7% maximum of DILUEPOX.

**CLEANING OF EQUIPMENT**

Equipment used for the preparation and application of APSECOL RESIN must be cleaned immediately after use with DILUEPOX. After the product has cured, removal can only be done mechanically.

**WARNINGS**

Do not use APSECOL RESIN to fill irregularities. Lay concrete, plaster over fresh adhesive. Protect the manufactured product from sun, heavy rain and frost for at least 7 days.

Temperature, ventilation, substrate absorption and laying material may vary the workability and setting time of the adhesive. If necessary, request the safety data sheet.

Do not use APSECOL RESIN on plastics, resilient materials, metals and wood.

Recommendations:

- Do not apply to bituminous substrates;
- Do not apply on surfaces with poor mechanical strength;
- Do not add water or stir the mixture as it sets to extend the pot life;
- Avoid application in full sun or high winds.

**HEALTH AND SAFETY WARNINGS.**

For information on safety regulations, hazard statements and cautionary advice, rely on the latest MSDS by making a request at:

[ufficiotecnico@apsebg.it](mailto:ufficiotecnico@apsebg.it)

**STORAGE**

Shelf life of more than 12 months when stored in original packaging in a dry, moisture-free place. Store at temperatures between +5°C and +35°C.

**DISPOSAL**

Dispose of contents and/or container in accordance with local regulations.


**PRODUCT TECHNICAL DATA  
PHYSICAL CHARACTERISTICS (at +20°C)**

FEATURE	NORMATIVE	RESULT	
		COMPONENT A	COMPONENT B
Appearance	-	Liquid	Liquid
Color	-	Grey	Amber opalescent
Specific gravity	EN ISO 2811-1	1,10 g/cm <sup>3</sup>	1,03 g/cm <sup>3</sup>
Viscosity	EN 8490	800 cps	2300 cps

**APPLICATION DATA (at +23°C and 50% RH).**

Mixing ratio	comp. A : comp. B = 10 : 5 parti in peso
Color of dough	grigio
Specific weight of the mixture (g/cm <sup>3</sup> )	1,05 (A+B)
Consistency of the mixture	fluida densa
Workability time at +20°C	120 min.
Minimum working temperature	+8°C
Adhesion to dry concrete	> 3 MPa, rottura del CLS (EN 13892/8)
Adhesion to metal	> 17 MPa
Adhesion to wet concrete	> 1,5 MPa
Walkability	24 ore
Complete curing	7 gg

**PRODUCT PERFORMANCE IN ACCORDANCE WITH THE STANDARD EN 1504-4**

FEATURE	NORMATIVE	RESIN (A+B) PERFORMANCE	MORTAR (A+B+C) PERFORMANCE
Bond Strength Adhesion	UNI EN 12636	≥ 3 N/mm <sup>2</sup>	
Shear Strength	EN 12615	≥ 2,0 N/mm <sup>2</sup>	
Compressive strength	EN 12190	≥ 30 N/mm <sup>2</sup>	≥ 60 N/mm <sup>2</sup>
Shrinkage/Expansion	EN 12617-1	≤ 0,1 N/mm <sup>2</sup>	
Shear Resistance	EN 12615	≥ 1,5 N/mm <sup>2</sup>	
Coefficient of Thermal Expansion	UNI EN 1770	≤ 100x10 <sup>-6</sup> k <sup>-1</sup>	
Water Sensitivity	UNI EN 12636	ND	
Modulus of elasticity	UNI EN 13412	2000 N/mm <sup>2</sup>	
Durability	EN 13733	ND	
Glass Transition Temperature	UNI EN 12614	≥ 40°C	
Workability	UNI EN ISO 9514	120 min at 23° C	

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