

1 TO 3 MM THICK, SELF-LEVELLING
TWO-COMPONENT EPOXY COATING
FOR FLOORS IN THE FOOD INDUSTRY



DESCRIPTION

APSELIV 30 is a two-component epoxy formulation suitable for resinous coatings of the self-levelling and/or multi-layer type and/or as a coating with a smooth or non-slip surface appearance, with thicknesses from 1 to 3 mm.

FIELDS OF APPLICATION

APSELIV 30 is used for floor coverings with the following applications:

- Coatings for dairies, oil mills, etc;
- Chemical and pharmaceutical industries;
- Coatings for the food industry;
- Coatings for laboratories, sterile rooms and hospitals;
- Coatings for aseptic rooms.

PACKAGING

Coloured:

Comp. A + B = 5 + 1.5 kg in metal cans
or

Comp. A + B = 16 + 4.8 kg in metal milk

Converter:

A + B = 14.4 + 4.8 kg metal cans

CONSUMPTION

1. Self-levelling coating (2 mm thick)

0.5 kg/m² APSEPRIMER NS 125

1.5 kg/m² Quartz dusting

1.5 kg/m² APSELIV 30 (A+B)

1.3-1.5 kg/m² Quartz Livel (Charge)

2. Self-levelling coating with chips (2 mm thick)

0.5 kg/m² APSEPRIMER NS 125

1.5 kg/m² Quartz dusting coat

1.5 kg/m² APSELIV 30 (A+B)

1.3-1.5 kg/m² Quartz Livel (Charge)

1.5 kg/m² dusting chips

0.120 kg/m² VERNILUX POL TR

As these are self-levelling compositions, the flatness conditions of the substrate greatly influence consumption.

3. Multilayer coating (1.5 mm thick)

0.7 kg/m² APSEPRIMER NS 125

1.5 kg/m² Quartz dusting

0.8 kg/m² APSELIV 30 (A+B) (RUVIDO)

1.4 kg/m² APSELIV 30 (A+B) (SMOOTH)

MIXING RATIO

The mixing ratio by weight is:

Comp. A : B = 100 : 30

Loading ratio

Binder (A+B) : inert = 13 : 10

CHARACTERISTICS AND BENEFITS

APSELIV 30 is a two-component, fillerised formulation based on epoxy resins. It is particularly suitable for the food industry. APSELIV 30 can be applied in thicknesses up to 3 mm. APSELIV 30 is recommended for environments with medium chemical aggression and severe mechanical stress. Due to its aesthetically pleasing appearance, APSELIV 30 can also be used as a civil or decorative flooring.

APSELIV 30 has the following advantages:

- Good resistance to chemical aggression;
- Good resistance to mechanical stress
- Aesthetically pleasing appearance for use also in civil engineering;
- Operating temperature from -20°C to +60°C.

CERTIFICATIONS

APSELIV 30 complies with UNI EN 13813: materials for screeds (DoP n° 427).

ISO 9001 certified quality management system (Certificate No. IT.17.0227.01.QMS).

APSE SRL is an active member of CONPAVIPER.





SUBSTRATE PREPARATION

Surfaces must be flat, clean, free of dust, oil, grease, mud, crumbling parts, paintwork and anything that may impair adhesion. Any cracks must be repaired with AP300 FIX filler.

If necessary, before applying APSELIV 30 heat the room so that the substrate also reaches a temperature of 10°C. Before applying APSELIV 30, thoroughly vacuum the dust on the substrate.

Application of the primer APSEPRIMER NS 125

Pour all component B into component A and mix thoroughly until a uniform colour is obtained.

Load the product with QUARTZ LIVEL (0.1-0.5 mm) in a weight ratio of 1:0.8.

Spread the resulting mixture on the surface of the suitably prepared substrate and smooth with a smooth trowel, ensuring that the surface is perfectly covered.

Immediately after primer application, it is recommended to dust the surface with fine quartz (0.1-0.5 mm) to improve the adhesion of APSELIV 30.

When the APSEPRIMER NS 125 primer has hardened, proceed with the application of APSELIV 30.

PRODUCT PREPARATION

Mix the individual components separately. Pour component B (hardener) into component A (coloured resin) and mix for a few minutes with a drill at low speed until a lump-free and homogeneously coloured mixture is obtained. Still under slow agitation, add the required quantity of QUARZO LIVEL aggregate (0.1-0.5 mm) and mix until a homogeneous mixture is obtained.

METHOD OF APPLICATION

APSELIV 30 can be used as a self-levelling and multi-layer coating.

1. Self-levelling coating (thickness 2-3 mm)

- Properly prepare the substrate by shot-peening and subsequent cleaning of the surface;
- Prime the substrate with APSEPRIMER NS 125, according to the instructions in the paragraph 'Substrate preparation';
- Pour APSELIV 30 over the hardened primer and distribute it evenly with a notched trowel;
- It may be necessary to mark off the areas where APSELIV 30 is to be applied with rulers and self-adhesive strips of suitable thickness;
- It is recommended to spread and level the mortar, and to even it out with a bubble break roller in crossed passes to facilitate the escape of air.

2. Multilayer coating (1-2 mm thickness)

- Properly prepare the substrate by shot-peening and subsequent cleaning of the surface.
- Prime the substrate with APSEPRIMER NS 125, according to the instructions in the previous paragraph 'Substrate preparation'. When the primer has hardened, apply the layer of APSELIV 30 with a smooth or notched trowel.
- Seed the surface with suitable quartz according to the thickness to be made
- Remove excess quartz that is not anchored
- Apply the finishing layer of APSELIV 30 with a smooth or notched trowel.
- If necessary, seed again and apply a further finishing coat of APSELIV 30 until the desired thickness is obtained.

Apply the product at temperatures between +5°C and +35°C.

CURING TIME

The curing time of a coat of APSELIV 30 is influenced by the ambient temperature. Refer to the table below for drying and curing times (at 20°C).

Pot-life	35 minutes
Setting time	10-60 min
Dust off	2-4 hours
Walkability	24-48 hours
Heavy carriageability	7 days
Complete hardening	7-10 days

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WARNINGS

- The temperature of the substrate and the uncured product must be at least 3°C above the dew point to reduce the risk of condensation or white bloom on the finish.
- Low temperatures and high humidity levels increase the probability of white bloom.
- Do not apply APSELIV 30 on dusty or crumbling substrates;
- Do not apply APSELIV 30 on substrates soiled by oils, grease, etc;
- Do not apply APSELIV 30 on substrates not properly prepared and not treated with APSEPRIMER NS 125;
- Do not expose the mixed product to heat sources;
- Do not apply APSELIV 30 on damp substrates or subject to capillary rising damp;
- Do not dilute APSELIV 30 with solvents or water;
- Do not apply APSELIV 30 outdoors;

CLEANING OF TOOLS

The tools used for the preparation and application of APSELIV 30 (A+B) must be cleaned immediately after use with the epoxy solvent DILUEPOX. After hardening of the product, removal may only be carried out mechanically.

HEALTH AND SAFETY

For information on safety regulations, hazard statements and precautionary advice, please refer to the latest safety data sheet, by requesting it at: ufficiotecnico@apsebg.it

STORAGE

Shelf life more than 12 months if stored in original packaging, in a dry place and free of moisture. Store at temperatures between +5°C and +35°C. Heat plastic containers in a bain-marie if frost or crystals form.

DISPOSAL

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



PRODUCT TECHNICAL DATA

PHYSICAL CHARACTERISTICS (at +20°C)

FEATURE	STANDARD	RESULT	
		COMP. A	COMP. B
Appearance	-	Liquid	Liquid
Colour	-	Colored	Transparent
Specific weight	EN ISO 2811-1	1,50 g/cm ³	1,00 g/cm ³
Viscosity	EN 8490	2150 cps	300 cps

PHYSICAL CHARACTERISTICS OF THE MIXTURE (at +20°C)

FEATURE	STANDARD	RESULT
Colour	-	Coloured to RAL scale
Mixture consistency	-	Dense fluid
Specific weight of mixture (A+B)	EN ISO 2811-1	1,35 g/cm ³
Specific weight of loaded mixture (A+B+QUARTZ)	EN ISO 2811-1	1,60 g/cm ³

PRODUCT PERFORMANCE ACCORDING TO UNI EN 13813

FEATURE	STANDARD	RESULT
Compressive strength at 28 days	EN 13892-2	≥ 85 N/mm ²
Flexural strength at 28 days	EN 13892-2	≥ 25 N/mm ²
TABER abrasion resistance	EN ISO 5470-1	< 100 mg
(Grinding wheel H22, 1000g, 1000 rpm)	EN ISO 6272	20 N.m
Impact resistance	EN 13892-8	>3,1 N/mm ²
Grip strength	EN 13036-4	66
Slip resistance (dry surface)	UNI 8298-10	0,1-1,0 MO 0,03-0,5 MO
Surface electrical resistance	EN 13501-1	0,002 kg/m ² h ^{0,5}
Capillary absorption and water permeability	EN ISO 868	>85
Shore hardness	EN 13501-1	F _{fl}

CHEMICAL RESISTANCES OF THE PRODUCT IN SERVICE ACCORDING TO THE STANDARD

FEATURE	STANDARD	RESULT
Hydrocarbon mixture	EN 13529	Class I
Sulphuric acid 20		Class I and II
Sodium hydroxide 20%		Class I and II
Lactic acid		Class I and II
Surfactants		Class I and II

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