

SPECIFICATIONS

Prepared on:
March 16, 2005



Updated on:
December 21, 2007

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Product name: APP 2K Grund EP

A binary, chromate-free, epoxide filling primer containing 2K-zinc phosphate. Designed for the active anticorrosion protection for motor cars, buses, and trucks. It adheres very well to steel, zinc-coated steel, aluminium, glass fibre-reinforced plastics, and mineral bases. For conventional use with polishing, for the “wet-on-wet” method, as an adhesion improving primer, and as an insulator on thermoplastic bases.

Container: APP 2K Grund EP - 1.0 kg; APP Harter EP EPHN - 0.2 kg.

Product and additives: APP 2K Grund EP;
APP 2K Harter EP EPHN - hardener with standard setting time;
APP 2K Acryl Verdunnung AVN;
APP 2K Acryl Verdunnung AVS.

Specifications:

Colour: light grey
Binder: epoxide resin
Solid particles content: 68%-72% by weight
Product viscosity (DIN 53211): 160-180 s 4 mm DIN
Gloss (DIN 67530): > 10%-20% / 60° (mat)

Output: 5-6 m²/l.

Caution!

In practice the output depends on certain factors including: object shape, roughness of the base, method of application and working conditions.

Properties:

- electrostatic spreading possible
- excellent anticorrosion protection
- suitable as an insulating primer for thermoplastic bases
- high resistance to mechanical damage
- exceptional resistance to high temperature:
continuous exposure: 150°C; short-time exposure: 180°C
- adhesion test (DIN 53151): steel: Gt 0 (very good);
zinc: Gt 0 (very good); aluminium: Gt 0 (very good).

Base

Proper base types: Ferrous metals, steel, zinc-coated steel sheet, aluminium, glass fibre-reinforced materials, mineral bases.
Polished factory-made coats.
Surfaces pre-coated with polyester products, e.g. PE Poly-Plast.
Thermoplastic bases.

The above information complies with current knowledge on our products and their possible applications. This guarantees no specific properties or usability in particular conditions. Users should observe guidelines and warnings provided on product labels and specified in material safety data sheets. We hold no responsibility if conditions beyond our control affect the final result of work.

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- Base preparation:
- Iron, steel: clean, possibly sand blast (remove all traces of rust, scale, oxides, and any rolling residue), and degrease using APP W900 Silikonentferner anti-silicone remover.
 - Zinc: clean with a base ammonia agent, e.g.: 10 l of water + 0.5 l of ammonia + 25 ml of detergent.
 - Zinc: clean, sand blast, and degrease using the APP W900 Silikonentferner anti-silicone remover.

Application examples:

- Iron, steel:
- grounding: APP 2K Grund EP (50-70 μm)
 - top coat: ColorMIX APP 2:1 (50-60 μm)
- Zinc:
- grounding: APP 2K Grund EP (50-70 μm)
 - top coat: ColorMIX APP 2:1 (50-60 μm)
- Aluminium:
- grounding: APP 2K Grund EP (50-70 μm)
 - top coat: ColorMIX APP 2:1 (50-60 μm)

Application

Mixing ratio(s):

- A) Mixing ratio by weight:
- 5 parts APP 2K Grund EP
 - 1 parts APP 2K Harter EP EPHN
- B) Mixing ratio by volume:
- 3 volumes APP 2K Grund EP
 - 1 volume APP 2K Harter EP EPHN



The proper spraying viscosity of the mixture is obtained by adding from 20% to 25% of the APP 2K Verdunnung AVN/AVS thinner for binary products.

Caution!

Use the APP 2K Harter EP hardener only.
Never exceed recommended hardener amount.

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Applying:



A) Pneumatic spraying:

Apply using a spray gun equipped with a $\phi 1.5$ - $\phi 1.8$ mm nozzle at an air pressure ranging from 3.0 to 5.0 bar.

B) Hydrodynamic spraying:

When applying the lacquer using the hydrodynamic (airless) spraying method, use a mixture containing 10%-15% of the thinner, and a 0.28-0.33 mm (65-95°) nozzle. Proceed at the pressure ranging from 120 to 150 bar.

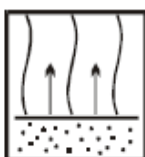


Number of layers:

- 2-4 for pneumatic spraying
- 1-2 for hydrodynamic spraying

Coat thickness: 50-70 μm .

- minimum temperature: +10°C
- maximum relative humidity: 80%



Evaporation time between successive layers at a temperature of +20°C: from 5 to 10 minutes.

Usability time for a ready-to-use mixture: 7-9 hours.

Drying:



At the temperature of +20°C:

Dust dryness: 45-50 minutes

Handling possible: 4-5 hours

Treatment possible: 10-12 hours

Full hardening: 24 hours

Repainting: min. 1 hour

Caution!

Spraying of the finishing paint without polishing is possible after 1 hour at the earliest, but not later than after 24 hours.



At the temperature of +60°C:

Dust dryness: 10 minutes.

Treatment possible: 45 minutes.

Repainting: -- minutes.

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Polishing:



After complete hardening, that is after 24 hours, it is possible to polish the surface before spreading the next coat.

For example, polishing for top coat lacquers:

- wet polishing by hand with P600-P1000 abrasive paper;
- dry machine polishing with P360-P400 abrasive paper.

Coverage:

Poly-Plast polyester products.

Filling primers, e.g. APP 2K Acryl Filler 5:1.

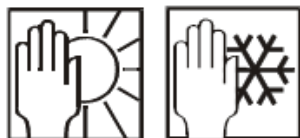
Base paints.

Unary and binary top coat lacquers, e.g.: APP 2K Acryl Lack, APP Color MIX RAL 2:1, APP 2K Acryl Lack MS 2:1 RAL.

Equipment cleaning:

Nitrocellulose solvent.

Storage:



Store in original, closed containers in a dry and well-ventilated room. Protect against freezing.

Industrial safety regulations:



For professional use only.

See: information on product labels and/or in Hazardous Material Safety Data Sheet.

Users should observe all industrial safety regulations applicable in their countries.

VOC:

Permissible VOC content [g/l] in a ready-to-use product.

540 g/l for APP 2K Grund EP

Maximum VOC content [g/l] in a ready-to-use product.

540 g/l for APP 2K Grund EP

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