

Technical Data Sheet

Hydro 2C Epoxy Primer 5710

Very good adhesive water-based 2C epoxy primer meeting strict corrosion protection requirements

Basis

Water soluble epoxy resin

Color

Beige, red brown, light gray, pebble gray, white, black

Gloss grade Matt

Properties

- fast physical drving
- excellent corrosion protection
- good chemical and solvent resistance
- excellent adhesion even on metallic surfaces
- abrasion-resistant with a high mechanical resistance
- can be coated with Hydro and solvent-containing 2C and 1C paints

Field of application

For all areas of metal coating, with the highest demands on corrosion protection properties and excellent mechanical parameters. Perfectly suitable for appliances, automobile accessories, construction elements, contruction sections (steel and aluminium), agricultural and construction machinery, fittings, furniture (indoor), garage doors, garden furniture and equipment, home appliances, medical technical equipment, shopfitting, exhibition stand construction, light fixtures, machines, motors, gears, utility vehicles, radiators, racks, switchgear cabinets, silos, steel boxes, steel cylinders, container, gates and fence systems, doors, frames, vending machines and housing and construction site containers.

Technical data

Density¹⁾

1.52 to 1.62 g/cm³ (in accordance with DIN EN ISO 2811)

Theoretical coverage

280 to 320 m²/kg ¹⁾²⁾ (with 1 µm dry film thickness)

VOC-content 105 to 125 g/l²⁾

Solids content 62 to 68 weight %¹⁾ Delivery viscosity at 20°C 300 to 420 mPas

ph-value 6.5 to 7.5

Stability 150 to 200 µm (wet film)

Salt spray test ³⁾

Delamination at scribe: $\leq 2 \text{ mm}$ (in accordance with DIN EN ISO 4628-8)

on Gardobond OC: ≥ 480 h on SA 2 ¹/₂ sand-blasted steel: ≥ 480 h (in accordance with DIN EN ISO 9227-NSS)

Condensation water test ³⁾

Degree of blistering 0 (S0) (in accordance with DIN EN ISO 4628-2)

on Gardobond OC: ≥ 480 h on SA 2 1/2 sand-blasted steel: ≥ 480 h (in accordance with DIN EN ISO 6270-2)

Labelling

See current safety data sheet.

- 1) depending on color
- 2) in mixture
- 3) in combination with recommended coatings (see coating recommendation)



Coating recommendation

Substrates ¹⁾	Prime coat	Intermediate coat	Top coat ²⁾
Steel preferably sand-blasted (degree of purity at least SA 2 ½ in accordance with DIN EN ISO 12944,	Hydro 2C Epoxy Primer 5710 40 to 60 μm	If required (specified film thickness), a second layer can be applied using the corresponding primer.	Hydro 2C PUR Paint 5860, 5861, 5862, 5863 40 to 60 μm
Part 4), iron or zinc- phosphated.			2C PUR High Solids Paint 5730, 5731, 5732, 5733,
Cast iron			5736, 5737 40 to 80 μm
Galvanized steel			2C PUR Acrylic Paint 5740, 5741, 5742, 5743,
Aluminium			5744, 5746, 5747, 5748, 5749
Eloxal			40 to 80 µm

1) Generally, the substrate shall be free from grease, oil, separating and drawing agents as well as corrosion products and other impurities.

2) The second coating should be done within 48 hours to guarantee a sufficient intermediate adhesion. After this period you must check if the surface should be sanded beforehand.

Hardener

Epoxy Hardener 5770.-.0100

Basis (hardener) Modified Polyaminoamide

Storage (hardener)

The shelf life in original closed containers is 3 months. Stock dry and at room temperature. Protect against heat and direct sun impact. Keep container closed at all times. Protect contents for surface drying/desiccation. Dried paint residues and skin are not soluble and can only be removed by sieving.

Process

Material has to be stirred until homogeneous before application.

Mixing ratio

9:1 weight % (6.3:1 vol. %)

Mixing

As 2C system, the actual paint and the hardener are supplied separately and mixed homogeneously in the specified mixing ratio just before application. In case of manual application ensure that the paint and the hardener are stirred thoroughly under agitation before thinning to application viscosity. Degassing for 15 minutes is recommended before use. Working equipment is preferably cleaned by water. Conventional solvent based thinner may leads to coagulation. Dried paint can cleaned with thinner.

Thinning

Demi Water 5110. Disperse homogeneously by stirring.

Pot life

Max. 3 to 4 h (at 20 °C)

Application temperature

> 15 °C (object temperature)

Air humidity

< 80 % r. h.

Compatibility

Compatibility is given only in combination with the hardeners, thinners and top coats mentioned in this Technical Data Sheet.

Application

Air-mix spraying, air spraying, limited roller/brush application

Drying

Air drying

(at + 20 °C, 65% r. h.)

Dust-dry after approx. 1 hour, non-sticky after 2 hours, dry and ready for re-working after approx. 5 hours. Fully cured after 8 to 10 days.

Oven-drying

Keep the flash-off time for 30 minutes. Afterwards forced stoving the paint for approx. 30-60 minutes at an max. object temperature of approx. 60 °C.



Spray data

Process	Nozzle	Pressure	Application viscosity ¹⁾
Air-mix spraying	0.23 to 0.33 mm	120 to 150 bar (material) 1 to 3 bar (air)	40 to 80 sec.
Air spraying	1.2 to 1.7 mm	4 to 5 bar	20 to 30 sec.

1) measured in DIN 4 mm flow cup (in mixture)

Packaging

30 kg. Further container sizes available upon request.

Storage

6 months after receipt. Store in original closed container, dry and at room temperature. Protect against heat and direct sunlight.

Remark

This Technical Data Sheet is based on intense development work and many years of practical experience. The contents do not constitute any contractual relationship. The user/buyer is not released from his/her obligation to test our products for suitability for the intended application. In addition, our General Terms and Conditions shall apply.

As soon as a new edition of this Technical Data Sheet is issued, the previous specifications become invalid. If you need the current version, please contact your Brillux consultant. Version 6

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