

## Hydrapid 1C Acrylic Primer 5404

**Especially fast-drying, single-component, water-based spray primer with excellent corrosion protection**

### Composition

Water-based acrylate resin

### Colors

Beige, red brown, light gray, white, black

### Gloss grade

Matt

### Properties

- fast drying (dryness grade T1 in accordance with DIN 53150 after 30-45 minutes)
- can be overcoated after 1 to 2 hours
- quick further processing possible
- excellent corrosion protection (C4 high, in accordance with DIN EN ISO 12944-2 on degreased steel sheet)
- very good early water resistance
- very high yield
- high degree of stability
- excellent adhesion on steel and many NI metals
- water-dilutable
- VOC compliant
- excellent mechanical values

### Field of Application

For all applications requiring a high degree of corrosion protection and quick further processing. Ideal for automobile accessories, structural elements/profiles made of steel and aluminum, containers, farming and construction machinery, shop and trade fair design, utility vehicles, silos, steel tanks, steel hall construction, doors and door frames, vending machines, etc.

### Technical Data

#### Density

1.40 to 1.52 g/cm<sup>3</sup> <sup>1)</sup>  
(in accordance with DIN EN ISO 2811)

#### Theoretical coverage

approx. 322 to 357 m<sup>2</sup>/kg <sup>1)</sup>  
(at 1 µm dry film thickness)

#### VOC content

< 60 g/l

#### Solids content

62 to 69 weight-% <sup>1)</sup>

#### Stability

approx. 200 µm (wet film)

#### Salt spray test <sup>2)</sup>

Delamination at scribe: ≤ 2 mm  
(in accordance with DIN EN ISO 4628-8)  
on degreased steel: ≥ 720 h <sup>3)</sup>  
on SA 2½ sand-blasted steel: ≥ 720 h  
(in accordance with DIN EN ISO 9227-NSS)

### Condensation water test <sup>4)</sup>

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

on degreased steel: ≥ 480 h <sup>3)</sup>

on SA 2½ sand-blasted steel: ≥ 480 h  
(in accordance with DIN EN ISO 6270-2)

### Delivery viscosity at 20 °C

60 to 70 sec./DIN 4 mm

### pH value

8.0 to 9.0

### Cross-cut test <sup>3)</sup>

Gt 0  
(in accordance with DIN EN ISO 2409)

### Erichsen cupping <sup>3)</sup>

> 8 mm  
(in accordance with DIN EN ISO 1520)

### Impact test <sup>3)</sup>

revers: ≥ 100 ip  
direct: ≥ 100 ip  
(in accordance with ASTM D 2794-69)

### Flash point

incombustible

### Labeling

See current safety data sheet

1) depending on color

2) in combination with recommended coatings (see coating recommendation)

3) Gardobond OC

4) single-layer

## Coating recommendation

Substrates <sup>1)</sup>	Prime coat	Intermediate coat <sup>2)</sup>	Topcoat
<b>Steel</b> preferably iron or zinc phosphatized  <b>NI metals, galvanized steel</b>	Hydrapid 1C AC Primer 5404 60 to 80 µm	normally not necessary	Hydrapid 1C AC Paint 5481, 5482 40 to 60 µm
<b>Steel</b> preferably blast cleaned (degree of cleanliness at least SA 2 ½ in accordance with DIN EN ISO 12944-4), iron or zinc phosphatized  <b>cast iron</b>	Hydrapid 1C AC Primer 5404 60 to 80 µm	Hydrapid 1C AC Primer 5404 60 to 80 µm	Hydrapid 1C AC Paint 5481, 5482 40 to 60 µm

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

2) In the case of topcoats with intense color shades, an additional intermediate coat in color RAL 9010 (approx. 40 µm) using 5482.-.9010, for example, is required.

### Process

Material has to be stirred until homogeneous before application.

### Thinning

Demi Water 5110.  
Disperse homogeneously by stirring.

### Application temperature

≥ 15 °C (object temperature  
3 °C above dew point)

### Air humidity

< 80 % relative humidity

### Compatibility

Compatibility is given only in combination with thinners and topcoats mentioned in this Technical Data Sheet.

### Application

Air spraying, Air-mix spraying, Airless spraying

### Drying

#### Air drying

(at +20 °C, 65 % r. h.).

Dust-dry after 30 to 45 minutes, non-sticky and ready for application of next coat after 1 to 2 hours. Fully cured after 7 to 10 days.

### Stove drying

Allow for a flash-off time of approx. 15 to 20 minutes. Then, stove-dry for approx. 30 minutes at an object temperature of 60 °C or for 20 minutes at an object temperature of 80 °C.

With lower temperatures and/or higher humidity allow for longer drying times.

Thermoplastic paint system: do not expose to temperatures > 120 °C.

## Spray data

Process	Nozzle	Pressure	Application viscosity <sup>3)</sup>
Air spraying	1.2 to 1.7 mm	2 to 4 bar	20 to 40 sec
Air-mix spraying	0.23 to 0.33 mm	80 to 150 bar (material) 1 to 3 bar (air)	45 to 60 sec
Airless spraying	0.23 to 0.33 mm	80 to 150 bar (material)	45 to 65 sec

3) Measured in a DIN 4 mm flow cup.

## Packaging

30 kg.

Further container sizes upon request.

## Storage

6 months after receipt.

Store in original closed container, dry and at room temperature.

Protect against heat and direct sunlight.

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.

## Remarks

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 4

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