

## Hydro Stove Enamel

**5500 gloss**  
**5501 silk gloss**  
**5502 silk matt**  
**5503 matt**

**Water-based stove enamel for mechanically resistant coatings in four gloss grades**

### Basis

Polyester resin, water-dilutable

### Colors

All common color systems

### Gloss grade

5500 gloss,  
> 80 units/60°  
5501 silk gloss,  
50 to 60 units/60°  
5502 silk matt,  
30 to 40 units/60°  
5503 matt,  
10 to 20 units/60°  
(in accordance with  
DIN EN ISO 2813)

### Properties

- very good weather resistance
- very good gloss and color stability
- very good stability against yellowing
- excellent adhesion properties
- only one coat required even on difficult substrates
- good elasticity
- good corrosion protection in combination with suitable primers
- water-dilutable, thus environmentally-friendly

### Field of Application

Thanks to excellent properties, the material is perfect for industrial serial coating on iron substrates. In combination with suitable primers, weather-resistant coatings with very good gloss and color stability and excellent corrosion protection values are obtained. Perfect for structural elements / structural sections (aluminium), construction and agricultural machines, furniture (interior), garden furniture and equipment, shop and trade fair design, lamps/luminaires, electrical cabinets, doors, frames as well as vending machines.

### Technical data

#### Density

1.0 to 1.5 g/cm<sup>3</sup> <sup>1)</sup>  
(in accordance with  
DIN EN ISO 2811)

#### Theoretical coverage

280 to 330 m<sup>2</sup>/kg <sup>1)</sup>  
(with 1 µm dry film thickness)

#### Solids content

35 to 59 weight % <sup>1)</sup>

#### Delivery consistency at 20 °C

75 to 85 sec./DIN 4 mm

#### pH value

8.0 to 8.8

#### Stability

120 to 160 µm (wet film)

#### VOC content

< 150 g/l <sup>1)</sup>

#### Labeling

See current safety data sheet.

1) depending on color

## Coating recommendation

Substrates <sup>1)</sup>	Prime coat	Intermediate coat	Top coat
<b>steel</b> blast-cleaned (degree of cleanliness at least SA 2 1/2 in accordance with DIN EN ISO 12944, Part 4), iron phosphatized	Hydro Stove Enamel Primer 5610 20 to 40 µm	Usually not necessary.  In the case of topcoats with intense color shades (see "Process"), an intermediate coat in RAL 9010 (approx. 40 µm) using 5502.-.9010 is required.	Hydro Stove Enamel 5500, 5501, 5502, 5503 30 to 40 µm
<b>galvanized steel</b>	n/a		
<b>NI metals - interior</b> - tinplate - aluminium	n/a		
<b>NI metals - exterior</b> - tinplate - aluminium	Hydro Stove Enamel Primer 5610 20 to 40 µm		

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

### Process

Material has to be stirred until homogeneous before application.

### Thinning

Demi Water 5110.  
Disperse homogeneously by stirring.

### Application temperature

≥ 15 °C

### Compatibility

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

### Use of intense color shades

Brilliant intense color shades, particularly in the yellow, orange, red, magenta and yellow-green ranges (relevant RAL Classic Uni-Color shades see below) have a lower covering capacity.

With these color shades, we recommend applying an intermediate coat in RAL 9010 (approx. 40 µm) using 5502.-.9010.

### Affected RAL Classic color shades:

RAL 1003	RAL 2001	RAL 3011
RAL 1004	RAL 2002	RAL 3013
RAL 1006	RAL 2003	RAL 3016
RAL 1007	RAL 2004	RAL 3018
RAL 1012	RAL 2008	RAL 3020
RAL 1016	RAL 2009	RAL 3027
RAL 1017	RAL 2010	RAL 3031
RAL 1018	RAL 2011	RAL 4002
RAL 1021	RAL 3000	RAL 4004
RAL 1023	RAL 3001	RAL 4007
RAL 1028	RAL 3002	RAL 4010
RAL 1032	RAL 3003	RAL 6018
RAL 1033	RAL 3004	RAL 6026
RAL 1037	RAL 3005	RAL 8023
RAL 2000	RAL 3007	

### Application methods

Air spraying, air-mix spraying

### Drying

#### Stove drying

Keep the flash-off time for 10 to 15 minutes. Afterwards stoving the paint for approx. 20 minutes at an object temperature of approx. 140 °C or approx. 10 minutes at an object temperature of 160 °C.

## Spray data

Process	Nozzle	Pressure	Application viscosity <sup>1)</sup>
Air spraying	1.2 to 1.5 mm	2 to 4 bar	25 to 30 sec
Air-mix spraying	depending on plant	depending on plant	30 to 40 sec
ESTA–high rotation	depending on plant	depending on plant	20 to 25 sec.

1) measured in DIN 4 mm flow cup.

### Container sizes

25 kg.  
Further container sizes  
available upon request.

### Storage

6 months after receipt, stored in original closed container. Store in a dry place at room temperature. Protect the container from sources of 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.

### 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.  
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