

# Technical Data Sheet

## 2C PUR AC Paint 5744

Two-component polyurethane, fine-textured paint with excellent gloss and color fastness for both interior and exterior use



### Field of application

In decorative, highly weather-resistant quality, ideally suited for equipment, automotive accessories, structural elements/structural sections (steel and aluminum), construction and agricultural machinery, fittings, furniture (interior), garage doors, garden furniture and equipment, household appliances, medical equipment, shop and trade fair design, lamps/lights, machines, motors, drives, commercial vehicles, gate and fence systems, doors, door and window frames, and vending machines.

### Properties

- Outstanding weather resistance
- Good adhesion properties on many substrates
- High mechanical resistance
- Good resistance to chemicals and solvents
- Long-term temperature resistance up to 100 °C <sup>1)</sup>
- Fast drying
- High stability
- After complete curing (cross-linking), the paint film is physiologically harmless

### Material description

<b>Basis</b>	Combination of hydroxyacrylate and aliphatic polyisocyanate
<b>Color shades</b>	All common color systems. Small quantities up to 100 kg in all RAL-Classic-Uni color shades available quickly via the quick delivery service.
<b>Degree of gloss</b>	Matt
<b>Density</b>	1.0–1.5 g/cm <sup>3</sup> <sup>2)</sup> (in accordance with DIN EN ISO 2811)
<b>Theoretical yield</b>	360–430 m <sup>2</sup> /kg <sup>2) 3)</sup> (with 1 µm dry layer)
<b>Solids content</b>	50–68 wt.-% <sup>2)</sup>

<sup>1)</sup> Build-up in accordance with coating suggestion

<sup>2)</sup> Dependent on the color shade

<sup>3)</sup> In mixture

## Material description

**Delivery viscosity at 20 °C** 150–250 mPas  
90–110 sec./DIN 4 mm

**Accelerated weathering QUV-B/SE** After 600 hours residual gloss  $\geq$  50% of initial gloss  
(in accordance with DIN EN ISO 16474-3)

**Xenon accelerated weathering** after 1,000 h residual gloss  $\geq$  50% of initial gloss  
(in accordance with DIN EN ISO 16474- 2)

**Flash point** > 23°C

**Labeling** See current Safety Data Sheet.

## Coating suggestion

Substrates <sup>4)</sup>	Prime coating	Intermediate coat	Final coating
<b>Steel</b> Preferably sand-blasted (degree of cleanliness min. SA 2½ in accordance with DIN EN ISO 12944, Part 4), iron or zinc-phosphated.	2C PUR AC Primer 5705 40–60 µm	If required (film thickness specification), a second layer can be applied with the corresponding primer.  For top coats in intense color shades (see Application), an intermediate coating in color shade RAL 9010 (approximately 40 µm) is required with 5742.-.9010.	2C PUR AC Paint 5744 35–45 µm
<b>Cast</b>	2C PUR High Solid Primer 5703 40–80 µm		
<b>Galvanized steel</b>	2C Epoxy Primer 5706 40–80 µm		
<b>Aluminum</b>			
<b>Non-ferrous metals</b>			

<sup>4)</sup> The substrate must generally be free of fats, oils, separating and drawing agents, as well as dirt and corrosion products including contaminants.

## Hardener

**PUR hardener** 5770.-.0010| 5770.-.011 (standard curing)  
5770.-.0020 (slow curing)  
5770.-.0030 (fast curing)

**Basis** Aliphatic polyisocyanate

**Shelf life** 6 months after receipt of goods.  
Store in a sealed container in a dry place and at room temperature (max.  
25 °C). Protect from heat sources and direct sunlight.

**Minimum shelf life** Refer to label

**Mixing ratio** 5 : 1 wt% (4 : 1 vol%)

**Mixing** Base paint and hardener are supplied separately as a 2C system, and  
are mixed homogeneously in the specified mixing ratio shortly before  
application.

## Application

Stir the material homogeneously before application.

**Thinning** PUR thinner 5102 (semi-volatile).  
Distribute homogeneously while stirring.

**Pot life** 4–6 h (at 20 °C)

## Application

**Humidity** < 80% relative humidity

**Application procedure** Air spraying, Air-Mix spraying

**Compatibility** Can only be combined with the hardeners, thinners and primers specified in this Technical Data Sheet.

**Application temperature** > 10 °C object temperature (3 °C above the dew point)

**Implementation in intense color shades** Brilliant intense color shades, in particular in the yellow, orange, red, magenta and yellow-green color ranges (for the RAL Classic Uni Color Shades affected, see below) have a lower hiding power. For these color shades, we recommend an intermediate coating in color shade RAL 9010 (approximately 40 µm) with 5742.-.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	

## Drying

**Air drying  
(at + 20 °C, 65% relative humidity)** Dust dry after approx. 30 minutes, tack-free and recoatable after approx. 2 hours, completely dry after 16–24 hours. Cured after 7 days.

**Oven drying** Ensure approx. 30 min. flash-off time. Then force-dry the coating for approximately 30 min. at an object temperature of approximately 60 °C.

Drying or cross-linking of the applied paint film is only possible at temperatures above + 5°C. The drying time decreases as the temperature increases.

## Spray data

Method <sup>5)</sup>	Nozzle opening	Pressure	Application consistency
Air spraying <i>Fine texture</i>	1.7 mm	3–5 bar	25–30 sec. <sup>7)</sup>
Air-Mix spraying <sup>6)</sup> <i>Fine texture</i>	0.23 mm	150–200 bar (material) 0.5–1 bar (air)	35–45 sec.

5) "Dry" application is required for an optimum surface appearance.

6) Due to different systems, different texture characteristics may result.

7) Thin by a maximum of 10%, depending on the desired texture characteristic.

## Container sizes

25 kg.  
In quick delivery service: 10 kg, 2.5 kg.  
Additional container sizes on request.

## Shelf life

24 months after receipt of goods  
Store in a sealed container in a dry place and at room temperature (max. 25°C). Protect from heat sources and direct sunlight. Always keep the containers tightly sealed. Protect the contents from surface drying and drying out. Dried paint residues and any surface-dried skin are insoluble in the paint and can only be removed by straining.

**Minimum shelf life** Refer to label

## Notes

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