

Technical Data Sheet

2C PUR Acrylic Paint 5743

Two-component polyurethane paint with excellent gloss and color stability for both interior and exterior use

Basis

Combination of hydroxyacrylate and aliphatic isocyanate

Colors

All common color systems

Gloss grade

Matt, 25 to 30 GU/60° (in accordance with DIN EN ISO 2813)

Properties

- excellent weather resistance
- good adhesion on most substrates
- high mechanical resistance
- good chemical and solvent resistance
- fast drying
- high degree of stability
- can be applied easily using air-mix and airless methods
- once fully cured (cross-linked) the coating is physiologically safe

Field of application

As highly weather resistant quality perfectly suitable for e.g. appliances, automobile accessories, structural elements/structural sections (steel or aluminum), construction machines, farming machines, small iron work, furniture (interior), garage doors, garden furniture and equipment, household appliances, medical equipment, shop and trade fair design, lamps and light fixtures, machines, motors, drives, utility vehicles, radiators, racks, switching panels, silos, steel tanks, steel cylinders, door and fence systems, doors, door and window frames, vending machines, housing and construction site containers.

Technical data

Density

0.9 to 1.4 g/cm^{3 1)} (in accordance with DIN EN ISO 2811)

Theoretical coverage

420 to 480 m²/kg ^{1) 2)} (at 1 µm dry layer)

Solids content

50 to 68 weight % 1)

Delivery viscosity at 20°C

90 to 120 sec./ 4mm

Stability

150 to 250 µm (wet film)

Accelerated weathering QUV-B/SE

after 600 h residual gloss ≥ 70 % of initial gloss (in accordance with DIN EN ISO 16474-3)

Accelerated weathering Xenon

after 2000 h residual gloss ≥ 70 % of initial gloss (in accordance with DIN EN ISO 16474-2)

Flash point

> 23 °C

Labelling

See current safety data sheet.

- 1) depending on color
- 2) in mixture

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Coating recommendation

Substrates 1)	Prime coat	Intermediate coat	Top coat
Steel preferably sand-blasted (degree of purity at least SA 2 ½ according to DIN	2C PUR Acrylic Primer 5705 40 to 60 μm	If required (specified layer thickness), a second layer can be applied using the	2C PUR Acrylic Paint 5743 40 to 80 μm
EN ISO 12944, Part 4), iron or zinc-phosphated.	2C PUR High-Solid Primer	In the case of topcoats with intense color shades	
Cast iron	5703 40 to 80 µm		
Galvanized steel		(see "Process"), an addi-	
Aluminum	2C Epoxy Primer	tional intermediate coat in RAL 9010 using 57429010, is required.	
Non-ferrous metals etc.	5706 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.

Hardener

PUR-Hardener 5770.-.0010 PUR-Hardener 5770.-.0011

Basis (Hardener): aliphatic polyisocyanate

Storage (Hardener):
PUR hardeners are susceptible to moisture. The shelf life in closed containers is 3 months. Stock dry and at room temperature. Protect against heat and direct sun impact.

Process

Material has to be stirred until homogeneous before application.

Mixing ratio

10:1 weight % (8:1 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.

Thinning

PUR Thinner 5102. Disperse homogeneously by stirring.

Pot life

4 to 6 h (at 20 °C)

Application temperature

> 5 °C (object temperature 3 °C above dew point)

Air humidity

< 80 % r. h.

Compatibility

Compatibility is only given in combination with the hardeners, 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 a intermediate coat in RAL 9010 (approx. 40 µm) using 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	

Application

Air spraying, air-mix spraying, airless, e-static, roller/brush application.

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Drying

Air drying (at + 20 °C, 65% r. h.) Dust-dry after approx. 30 minutes, non-sticky and ready for re-working after 2 hours, dry after 16 to 24 hours. Fully cured after 7 days.

Oven-drying

Allow for approx. 30 minutes flash-off time. Then allow the paint to stove in for approx. 30 minutes at an object temperature of approx. 80 °C.

Drying/cross-linking of the applied paint film requires temperatures of +5 °C or

higher. The drying time decreases when the temperature is increased.

Spray data

Process	Nozzle	Pressure	Application viscosity 1)
Air spraying	1.3 to 1.5 mm	4 to 5 bar	20 to 30 sec.
Air-mix spraying	0.23 to 0.33 mm	120 to 150 bar (material) 1 to 3 bar (air)	35 to 45 sec.

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

Packaging

25 kg.
Up to 100 kg order size:
2.5 kg, 10 kg.
Further container sizes available upon request.

Storage

12 month after receipt. Store in closed container, dry and at room temperature (max. 25 °C). 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.

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