

Technical Data Sheet

2C PUR Acrylic Paint 5746 gloss 5747 silk gloss

Two-component textured polyurethane paint with excellent gloss and colour stability for indoor and outdoor use in two degrees of gloss



Field of application

As a decorative, highly weather-resistant quality ideally suited for appliances, automobile accessories, construction elements/structural sections (steel and aluminum), construction machines, farming machines, furniture (interior), garage doors, garden furniture and equipment, household appliances, medical equipment, shop and trade fair designs, lamps/lights, machines, motors, drives, commercial vehicles, control cabinets, door and fence systems, door and window frames, doors, as well as vending machines.

Approvals/Permits

5746 Certificate of compliance for lacquering of machines processing dry foodstuffs of ISEGA-Forschungs- und Untersuchungs-Gesellschaft mbH, Aschaffenburg.

Prüfnummer 61861 U 24.

Confirmation of compliance with the demands on dry and non-fatty food contact materials (in accordance with FDA 21 CFR, Ch. I, edition March 29, 2022), ISEGA-Forschungs- und Untersuchungs-Gesellschaft mbH, Aschaffenburg (letter of 16/04/2024)

Properties

- excellent weather resistance
- good adhesion to many substrates
- high mechanical resistance
- good resistance to chemicals and solvents
- permanent temperature resistance up to 100 °C ¹⁾
- fast drying
- high degree of stability
- Effect images from fine to coarse structure achievable
- once fully cured the paint film is physiologically safe

¹⁾ In construction, in accordance with coating build-up

Technical data

Basis	Combination of hydroxyacrylate and aliphatic polyisocyanate
Colors	All common color systems
Degree of gloss	5746 gloss 5747 silk gloss
Density	1.0 to 1.5 g/cm ³ (in accordance with DIN EN ISO 2811) ²⁾
Theoretical coverage	360 m ² /kg (with 1 µm dry film thickness) ²⁾³⁾
Solids content	58 to 68 weight-% ²⁾
Delivery viscosity at 20 °C	thixotropic
Accelerated weathering QUV-B/SE	after 600 h residual gloss ≥ 50 % of initial gloss (in accordance with DIN EN ISO 16474-3)
Accelerated weathering Xenon	after 1.000 h residual gloss ≥ 50 % of initial gloss (in accordance with DIN EN ISO 16474-2)
Flash point	> 23 °C
Labeling	See current safety data sheet.

²⁾ depending on color

³⁾ in mixture

Coating recommendation

Substrates ⁴⁾	Prime coat	Intermediate coat	Top coat
Steel preferably sand-blasted (degree of purity at least SA 2 ½ in accordance with DIN EN ISO 12944, Part 4), iron or zinc-phosphated.	2C PUR AC Primer 5705 40 to 60 µm	If required (film thickness specification), a second layer can be applied with the corresponding primer.	2C PUR Acrylic Paint 5746, 5747 40 to 80 µm
	2C PUR High Solid Primer 5703 40 to 80 µm		
Cast Iron		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.	
Galvanized steel			
Aluminum	2C Epoxy Primer 5706 40 to 80 µm		
Non-ferrous metals among others			

⁴⁾ Generally, the substrate should be free from grease, oil, separating and drawing agents as well as corrosion products and other impurities.

Hardener

PUR-Hardener	5770.-.0010 5770.-.0011 (standard curing) 5770.-.0020 (slowly curing) 5770.-.0030 (fast curing)
Basis	Aliphatic polyisocyanate
Shelf life	6 months after receipt. 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 weight-% (4 : 1 vol.-%)
Mixing	As 2K system, the actual paint and the hardener are supplied separately and mixed homogeneously in the specified mixing ratio just before application.

Process

	Material has to be stirred until homogenous before application.
Thinner	PUR Thinner 5102 (medium-volatile) PUR Thinner 5101 (slowly volatile) Disperse homogeneously by stirring.
Pot life	4 to 6 h (at 20 °C)
Application temperature	> 10 °C (object temperature 3 °C above dew point)
Humidity	< 80 % relative humidity
Application	Air spraying.
Compatibility	Compatibility is given only in combination with the hardeners, thinners and primers mentioned in this Technical Data Sheet.
Implementation in intense color shades	Brilliant intense color shades, in particular in the realms of yellow, orange, red, magenta and yellow-green (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. RAL Classic color shades affected: 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 % r.h.)

Dust dry after approx. 30 minutes, Tack-free and suitable for recoating after approx. 2 hours, fully dry after 16 to 24 hours. Cured after 7 days.

Oven drying

Adhere to approx. 30 min. flash-off time. Then force-dry the coating for approx. 30 min. at an object temperature of approx. 60 °C.

It is only possible to dry or cross-link the applied paint film at temperatures above + 5 °C. The drying time decreases with the temperature increase.

Spray data

Process	Nozzle	Pressure	Application viscosity ⁵⁾
Air spraying fine structure	1.3 to 1.5 mm	4 to 5 bar	Undiluted Distance: approx. 25 cm
Air spraying coarse structure	1.5 to 2.5 mm	2 to 3 bar	Undiluted Distance: up to approx. 50 cm

⁵⁾ Measured in DIN 4 mm flow cup (in mixture).

Packaging

25 kg

Further container sizes available upon request.

Shelf life

24 months after receipt.

Store in a sealed container in a dry place and at room temperature (at most 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 surface-dried skin are insoluble in paint and can only be removed by sieving.

Minimum shelf life

refer to label

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 18.

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