

FREODUR

UV-Clearcoat ES1901GRA999

- UV-curable coating
- Good light- and weather resistance
- Roller coating and hot spraying
- Very good adhesion on UV printing ink
- Dual-cure application is recommended
- High flexible

Technical / Physical Data	Resin/ binder	UV curable urethanacrylat		
	Colour	colourless		
	Gloss value DIN 67530 and DIN EN ISO 2813	high glossy	> 90	geometry 60°
	Original viscosity	300 – 500 mPas/ 60 rpm		
	Density calculated	1,1 g / ml	+ / - 0,1	
	Solid content calculated	99,4 %	+ / - 2	
	Solid content in volume calculated	930 ml / kg	+ / - 20	
	Consumption calculated in original viscosity, without application loss	50 to 70 g / m ² dry film thickness 50 µm see „Special remarks“		

Storability Approx. 6 month in original packings at an ambient temperature of 5 to 25 °C, in case the original packings are tightly closed. Opened packing must be used very shortly. The minimum storage stability of each batch is mentioned on the product label. A storage time beyond the mentioned date doesn't necessarily mean that the material is unusable. In this case a check of the qualities which are important for the respective application is necessary. The coating has to beprotected from light.

Processing and application

Application

Components are to be mixed homogeneously (e.g. with high-speed mixer).

roller-coating:	in original viscosity
hot spraying:	nozzle: 1,2 mm spraying pressure: 3-4 bar temperature: 60-80°C
airmix:	nozzle: 0,12 mm/ 150° pressure: 100 bar temperature: 60°C

Substrates

aluminium, coil coated

Pretreatment

The substrate must be free of materials which prevent adhesion, e.g. oil, grease, dust and surfactant. According to the requirements we recommend to apply the suited chemical (e.g. phosphatizing, chromating) or / and mechanical (e.g. shot blasting) pretreatment.

Proposal for a coating system

substrate: aluminium, coil coated
primer: FREODUR-UV-Clearcoat ES1901GRA999

Application temperature

above 10 °C

Drying

UV-curing

max.dry film thickness 50 µm
radiation lamp: Ga-doted Hg-lamp and Hg-lamp
power: 120 W/cm
speed of belt: 3-5 m/min
min. UV dose: 2800 mJ/cm²

Dual curing (optional) mixing ratio by weight 10:1 FREODUR-UV-Dualcure-Hardener HU0139.
Potlife after hardener addition max. 8 hours/ 20°C

Cleaning of working equipment

EFD-Thinner 400450

Advise for safety protection and protection of health

The usual precautionary measures for ventilation as well as for personal protection are to be observed when handling painting materials. Detailed information about dangerous goods, sayfety data and recommendations concerning health protection and environment protection can be read in the corresponding safety data sheet.

Special remarks

Test condition

All information is based on a standard climate 20/65 DIN 50014.

For the calculation of the practical consumption loss additions have to be considered. Indications to this are the practical experience and advices given in DIN 53220.

All information are based on our product knowledge and experience. To the application we have no direct influence. For further information please don't hesitate to contact us.

The information mentioned herein are reference values and are not given as specification.