

Technical Data Sheet Rolic® RTC 126

Description	Rolic® RTC 126 photo curable resin is a stable, transparent and good adhering formulation used as top coat layer in a high performance barrier stack, e.g. in organic photo-voltaic (OPV) and organic light-emitting diode (OLED). This formulation is suited for the processing in atmospheric or inert environment with sheet to sheet or roll to roll equipment.		
Features	<ul style="list-style-type: none"> - VOC-free (volatile organic compound – free) - UV-curable (<395nm) - Crosslinking in atmospheric or inert environment - Good adhesion to a broad range of glues/adhesives - Formulation developed for slot die coating 		
Properties of liquid	Appearance	Clear liquid	
	Viscosity @ 25°C	40 mPa.s	(Brookfield DVII-CP40)
	Density	1.08 g/cm ³	
	Surface tension	~35 mN/m	
	Water content	<0.3%	(Karl Fischer)
	Refractive Index	1.47	(n _D 20°C)
Properties of film	E _{modulus}	~2'000 MPa / ~500 MPa	(DMA @ 25°C/120°C)
	Tg	~130°C	(DMA)
	Surface energy	~38 mN/m	(Contact angle method)
	Transparency	>95% of glass reference	(T @420-650nm, 20µm on glass)
	Haze	<1%	(H @420-650nm, 20µm on glass)
Processing	<p>Rolic® RTC 126 can be applied by a wet coating process, e.g. slot die coating, in a thickness range from 5 to 20µm.</p> <p>Rolic® RTC 126 is a UVA-curable material with a strong UVA-absorption up to 395nm with fast cross-linking in atmospheric or inert environment.</p> <p>Typical UV dose level is between 1 to 3 J/cm², depending on the UV-lamp properties. It is recommended to conduct a ladder study for optimization of the curing conditions. A post-bake processing may be beneficial for increased adhesion to the substrate (e.g. silicon nitride or silicon oxide).</p> <p>For optimal interface adhesion, a surface treatment (e.g. O₂ plasma) of the organic or inorganic substrate is recommended before processing Rolic® RTC 126.</p>		
Handling and Storage	Storage temperature	20°C – 25°C	
	Storage container	product must be protected from light (store in original packaging only)	
	Shelf life	6 months	

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