Technical Data Sheet Rolic® LCMO ROP 133-302

Description	Rolic® LCMO ROP 133-302 is a Linear Photo Polymerization (LPP) alignment material, which is a key material in Rolic's Light Controlled Molecular Orientation (LCMO) technology. In combination with Liquid Crystal Polymers (LCP), also called reactive mesogen solutions, the design and production of unique anisotropic thin films become possible. ROP 133-302 was developed to orient LCP ROF 5192-359, which itself is designed to form a λ/4 retardation film on a TAC film. Demonstrator samples of various Rolic® LCMO-optical films are available.	
Features	Rolic® LCMO-ROP formulations are designed to achieve the best performance in • photo alignment capability and transfer of the alignment information to the subsequent LCP material • customized coating properties for uniform layers • good adhesion of all layers in whole optical film stack • wide process window • high throughput • high yield	
Properties:	Solvent	1-Methoxy-2-Propyl-Acetate
	Solid content	2 %
	Aspect	slightly yellowish liquid
	Kinematic Viscosity	< 3 mm^2/s
Typical process Conditions:	Wet-coating	~ 5 µm
	Drying temperature	80 °C (depending on substrate)
	Drying time	~25 s
	Photo-sensitivity	UV-B (peak @ 313nm); collimated & linear polarized
	Exposure energy	~20 mJ/cm^2 (must be adjusted to process)
Customization	All LCMO materials can be customized to ensure compatibility to substrate, process and other interfaces for best optical performance, wide process window and high throughput.	
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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ROLIC Technologies Ltd. | Gewerbestrasse 18 | 4123 Allschwil | Switzerland | Phone: +41 61 487 22 22 | www.rolic.com | email: info@rolic.ch