

Technical Data Sheet Rolic® ROP 131-306

Description Rolic® ROP 131-306 is a solution of a photo-sensitive polymer for applications in LCMO. In combination with a Rolic LCP it enables the design and production of anisotropic thin films such as quarter wave or half wave retarders, as well as viewing angle enhancement films.

Rolic® LCMO Rolic® LCMO (Light Controlled Molecular Orientation) is a breakthrough technology for liquid crystal applications and stands for

- **Excellent orientation and high contrast:** Rolic's LPP (linearly photo-polymerizable polymer) and LCP (liquid crystal polymer) are based on highly functionalized polymers which offer the possibility to customize polarization direction, incident angle and exposure area according to final product needs;
- **Sub-micron resolution:** Rolic® LCMO enables orientation patterns with submicron resolution, opening up new possibilities for the design and functionality of optical films.
- **Extended service life:** Optical films produced with Rolic's LPP and LCP will maintain their orientation even under thermal stress, high humidity and exposure to intensive visible light.
- **Superior quality and quality consistency:** Rolic® LCMO eliminates mechanical brushing. Liquid crystals and liquid crystal pre-polymers are aligned contact-free by linearly polarized UV light. Scratches, dust and electrostatic charges are avoided, the yield is increased.
- **High throughput for mass production:** Due to high photo-sensitivity of Rolic's LPP and LCP, only few hundred milliseconds of LPUV-light exposure are needed to reliably induce the desired photo-alignment.

Typical Properties	Solvent	1-Methoxy-2-propanol acetate
	Solids content	3 %
	Aspect	slightly yellowish liquid
	Odor	solvent like
	Viscosity (Ubbelohde)	<3 mPas
	Flashpoint	43 °C
	Filtration	0.2 µm
	Photosensitivity	UV-B
	Exposure energy	5-200 mJ/cm ²

Handling and Storage	Rolic® ROP 131-306 is a light and temperature sensitive product.	
	Storage	room temperature, protected from light
	Shelf life	6 months

For more details, please refer to the Material Safety Data Sheet.

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