

Technical data sheet

PERMACOL 3510-series



DESCRIPTION

The PERMACOL 3510 series are optically clear UV-curing adhesives especially designed for very strong bonding of PMMA (acrylic glass / perspex / plexiglass). The monomer of this adhesive is methyl-methacrylate (MMA). During curing PMMA is formed. So, by using this adhesive PMMA is bonded with PMMA. This results in a very strong and durable bond.

Technical details	
Chemical type	Methyl-methacrylate
Color	Clear
Viscosity 3510-1	70 mPas
Viscosity 3510-2	600 mPas
Specific gravity	0,99 g/cm ³
Refractive index	1,43
Curing time	8-15 minutes
Hardness	83 Shore D
Glass transition (Tg)	70°C
CTE below Tg	95 ppm/°C
Tensile strength	66 MPa
Elongation at break	6%

USAGE INSTRUCTIONS

Can be cured with low intensity broad spectrum UV lamps. In practice this means all UV lamps except LED. Curing time depends on the spectrum and intensity of the lamp and the layer-thickness of the adhesive. Do not use high intensity UV lamps. This can result in bubbles in the bondline.

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BENEFITS

- Bonds PMMA GS and XT
- Optically clear / UV resistant
- Capillary (3510-1), gap-filling (3510-2)
- Great water and chemical resistance
- Curable with low intensity UV-light
- RoHS and REACH compliant

Maximum bonding strength is reached a day after curing.

Make sure the substrates are clean and free from dust, water, grease, fingerprints, oil, ect. Use isopropanol to clean the substrates.

Uncured adhesive can cause stress cracking of PMMA if it has too much internal stress. This can be solved by tempering the PMMA.

STORAGE

Store in its original packaging. This product is light sensitive. Avoid direct exposure to daylight and artificial lighting. See packaging for the expiration date. Shelf life: 12 months.

SAFETY

Use protective gloves to avoid direct contact with the skin. Keep away from fire. Check the Material Safety Data Sheet for specific safety information.

PACKAGING

The PERMACOL 3510 series are available in 50 gr bottles. Other options are available on request.