

Registered Quality and Environment Management System Company

Technical Data Sheet

Preliminary LOXEAL UV 30-14

Description

Ultraviolet curing adhesive specifically developed for bonding of PMMA. It provides high mechanical strength; fast curing is achieved with led low-power lamps. It's ideal for bonding of showcases, furniture, gifts and all PMMA structural applications.

Physical properties

Chemical type: acrylic resin/methylmethacrylate
Colour: transparent
Viscosity (+25°C - mPa s): 1.000 - 2.000

Shelf life: 4 months at +25°C in original unopened packaging

Curing properties

To obtain the best features, clean and dry parts to bond. The polymerization depends on the UV lamp radiation, on the distance from the lamp, on the thickness of the adhesive applied, on the light permeability of the pieces to bond and on geometry of the joint.

We recommend to use UV lights able to produce UV waves between 365 nm and 420 nm at 100mW/cm².

We recommend to cool the area irradiated with UV lamp while using thermoplastic materials.

Curing times may vary according to adhesive depth (maximum gap 2.5 mm).

Fixture time

(low-power lamps 4mW/cm²)

PMMA/PMMA 2 - 4 min

Typical features:

Shear strength (ISO 4587)

After 5' UV exposure : 0.4 N/mm^2 After 10' UV exposure : $> 4 \text{ N/mm}^2*$

*Substrate failure

Properties of cured adhesive (typical)

Hardness (Shore D): 70-80Refractive Index: 1,44Temperature range: -55° C/+120°C

Storage

Keep product in a cool and dry room at +5°/+25°C. To avoid contaminations do not refill containers with used product. We recommend to close the bottle/container after every use, to avoid any possible light-contact or environmental contamination. For more information on applications, storage and handling contact Loxeal Technical Service.

Safety and handling

Consult Material Safety Data Sheet before use.

Note

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