



LOXEAL®

ENGINEERING ADHESIVES

PUT IT ON & GO TO SLEEP



MEDICAL GRADE UV CURING ADHESIVE

LOXEAL 30-11

Technical Data



Overview:

Loxeal® UV 30-11 is a low viscosity fast curing adhesive under UV radiations or visible light with appropriate intensity. The adhesive has been formulated to bond ABS, PC and PVC with low stress cracking. It creates a flexible and tough plastic film.

This product is developed for assembling medical components. Approved for use according to ISO 10993 from Toxicon.

Physical Properties

Composition:	Urethane Acrylate
Colour:	Transparent
Viscosity (+25°C – mPas):	200 – 300
Specific Weight (g/ml):	1.05
Flash Point:	> +90°C
Refractive Index @ +25°C:	1.473
Shelf Life: 12 months at 25°C in original unopened packaging	

Stress Cracking

According to ASTM D3929:

@ 7 N/mm ²	> 15 minutes
@ 12N/mm ²	> 4 minutes

Polymerization Features

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

We recommend to use UV light that 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 Time

Substrate	Time (Seconds)
• PVC/PVC Rigid	~ 6
• PVC/PVC Flexible	~ 5
• PC/PC	~ 55
• PC/ABS	~ 55
• Plexiglass/Plexiglass	~ 6
• Glass/Glass	~ 6

Properties of the polymerised adhesive

Shear Strength ISO 4587 (N/mm ²):	
PC/PC	>9 N/mm ² (Breaking Piece)
PC/PC Rigid	>9 N/mm ² (Breaking Piece)
PC/PC> Flexible	>9 N/mm ² (Breaking Piece)
PC/ABS	>9 N/mm ² (Breaking Piece)
Tensile Strength (DIN 53504):	100 – 150%
Hardness Shore D:	50 – 65

Sterilization Effects:

Loxeal 30-11 shows excellent feedback after standard sterilization processes under E.T.O. and Gamma Radiations.

Storage:

We recommend to store this product in a cool and dry place at temperature not exceeding +25°C. To avoid contaminations, do not refill containers with used products. For more information on applications, storage and handling, contact Loxeal Technical Service.

Safety and Handling:

Consult the Safety Data Sheet before use.

Note:

The data contained herein, obtain in Loxeal laboratories, are given for information only; if specifics are required, please contact Loxeal technical department. Loxeal ensures abiding quality of supplied products according to its own specifics. Loxeal cannot assume responsibility for the results obtained by others which methods are not under Loxeal control. It is user's responsibility to determine suitability for user's purpose of any product mentioned herein. Loxeal disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from the sale or use of Loxeal products. Loxeal specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.

Everjoy Industrial Supplies Pte. Ltd.

38 Woodlands Industrial Park E1, #04-11 Singapore 757700

Tel.: +65 6748 3093 Fax: +65 6748 7202 Email: salesmgnt@everjoy.com.sg