

Description

Adhesive curing in seconds by exposure to ultraviolet light.
 Recommended for bonding glass to glass or glass with metal.
 Thanks to its exceptional transparency in thickness, it is recommended for bonding of precious crystals in the field of home furnishings and gifts.

Physical properties

Composition : acrylic urethane resins
 Colour : colourless
 Viscosity at +25°C (mPa s) 2.500 - 3.500
 Specific weight (g/ml) : 1,10
 Curing time UV (365 nm) : 6 - 10 seconds
 Gap to fill : 0,03 mm / 1,5 mm
 Flash point : > +100°C
 Shelf life : 1 year at +25°C in original unopened packaging

Curing properties

For better strength and durability we recommend to clean, degrease and dry surfaces to bond. The polymerisation UV is belonging to the intensity of the UV lamp, to the distance from the UV light source, to the bond line gap and to the light transmittance of the substrate the light shall pass through. We recommend high intensity UV light sources with minimum radiation between 365 nm and 420 nm at 100mW/cm². Curing time may vary according to adhesive gap.

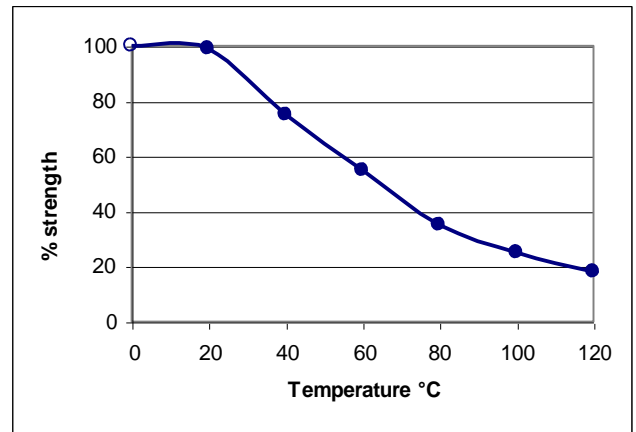
Properties of cured adhesive (typical)

*Tensile strength (ASTMD2095-69) : 8 - 14 N/mm²
 *Tensile at break (DIN 53504) : 15 - 25 N/mm²
 *Elongation at break (DIN 53504) : 80 - 120 %
 *Temperature range : -55°C /+120°C
 * Refractive index : 1,473
 * Light transmittance : > 98%
 *Hardness (Shore D) : 60 - 70
 * Coefficient of thermal expansion : 85 x 10⁻⁶ mm/mm/°C
 * Dielectric constant (+25°C 1000 Hz) : 4
 * Dielectric strength : 10 - 12 kV/mm

Environmental resistance

The graph below shows the mechanical strength vs. temperature.

Specimen steel to glass



Chemical resistance

Aged under conditions below after 24 hours from polymerisation at indicated temperature.

| Substance | °C | Resistance after 100 h | Resistance after 500 h | Resistance after 1000 h |
|-----------|----|------------------------|------------------------|-------------------------|
|-----------|----|------------------------|------------------------|-------------------------|

| | | | | |
|-----------------------|----|-----------|------------|-----------|
| Alcohol | 25 | excellent | excellent | excellent |
| Gasoline | 25 | excellent | excellent | good |
| Relative humidity 90% | 40 | discrete | sufficient | low |
| Refrigerant gases | 25 | excellent | excellent | excellent |

* For information on resistance with other chemicals, contact Loxeal Technical Service

Storage

Store the material in a cool and dry place at temperature of +5°C/+25°C. To avoid contaminations do not refill containers with used product. For more information on applications, storage and handling contact Loxeal Technical Service.

Safety and handling

Consult Material Safety Data Sheet before use.

Note

The data contained herein, obtained 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 sale or use of Loxeal products. Loxeal specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.