

Registered Quality and Environment Management System Company

# Technical Data Sheet

# **LOXEAL UV 30-35 Series**

## Description

Adhesive curing in seconds by exposure to ultraviolet light.

Recommended for bonding of glass to glass or glass to metal parts.

Designed for a long lifetime in wet environments; it provides a balanced forces transduction.

Ideal for bonding bathroom scales, door hinges for showers, aluminum and metal profiles on glass, traffic signs devices.

# **Physical properties**

Composition : acrylic urethane resin colour: colourless
Viscosity at +25°C (mPa s) 5000 - 8000 gel

Specific weight (g/ml): 1,10

Curing time UV (365 nm): 5 - 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**

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/cm<sup>2</sup>.

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

## Properties of cured adhesive (typical)

\*Tensile strength (ASTMD2095-69): 8 - 12 N/mm²
\*Tensile strength (ASTMD2095-69)

after 2 weeks +70°C/90% r.h.

\*Tensile at break (DIN 53504) :

\*Elongation at break (DIN 53504) :

\*Temperature range :

\*Refractive index :

\* Light transmittance :

\*Hardness (Shore D) :

\* 10 - 20 N/mm²

150 - 200 %

-55°C/+120°C

1,471

> 98%

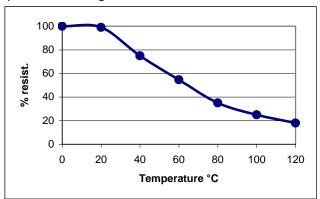
40 - 50

\* Water Absorption rate (ISO 62): < 1,5 % (2h boiling water)

#### **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	ç			Resistance after 1000 h
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Alcohol	25	excellent	excellent	excellent
Gasoline	25	excellent	excellent	good
Relative	40	excellent	excellent	good
humidity 90%				
Refrigerant	25	excellent	excellent	excellent
gases				

<sup>\*</sup> 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.

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