

Technical Data Sheet

LOXEAL 3459

Description

Loxeal 3459 is a fast curing chemically activated structural acrylic adhesive to be used with its specific Loxeal Activator. No mixing required, it bonds ferrites, metals, ceramics. Typical fixture time few seconds. Gel formulated, toughened, it achieves in very few minutes good shear and impact strengths. Ideal for high speed assembly production lines. Acid free.

Physical properties

Composition:	urethane methacrylate
Colour:	blue gel
Viscosity (+25°C - mPa	s): 15.000 - 25.000 thixo
Shelf life at + 25°C:	year in original unopened packaging

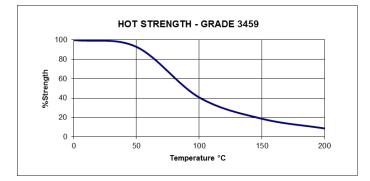
Curing properties at +25°C (typical) Ref.: Activator 20

Handling time:	20 - 40 seconds
Gap filling:	0,05 to 0,20 mm
Functional cure time:	10 - 20 minutes
Full cure time:	24 hours
Shear strength (ISO 4587):	20 - 30 N/mm ²
Tensile strength (ISO 6922):	20 - 25 N/mm ²
Impact strength (ASTM D950):	15 - 25 kJ/ m²
Temperature range:	-65°C/+165°C

Environmental resistance

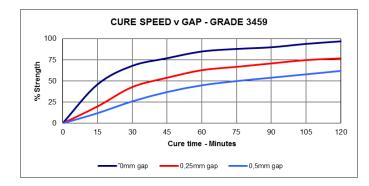
Hot strength

The graph below shows the mechanical strength vs. temperature.



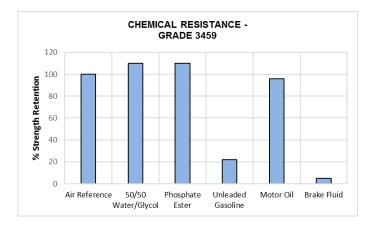
Cure speed v gap

The graph below shows the product shear strength (as %) at different increasing controlled gaps.



Chemical resistance

Steel specimens were immersed for 30 days at 85° C and tested at room temperature.



ST3459e/4 11/17 Pag.1/2

Directions for use

- Clean with Loxeal Cleaner 10 and allow to dry (water and grease may prevent adhesion on the parts) before assembling.
- 2. Apply Activator to one surface and adhesive to the other.
- 3. Press the parts until handling strength is achieved and clean the excess adhesive with an organic solvent.
- 4. For gaps larger than 0,5mm apply Activator to both surfaces, then apply the adhesive to one surface and assemble.
- **5.** Allow the parts at least 24 hours to full cure before disturbing them

Storage

Keep product in a cool and dry room not above +25°C (avoid direct light exposure). To avoid contaminations do not refill container 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.