









HIGH STRENGTH THREADLOCKING ADHESIVE

LOXEAL 83-55 Technical Data



Overview:

Loxeal® 83-55High Strength Anaerobic Adhesive for locking and sealing of bolts, nuts, studs and threaded fasteners that do not require dismantling. It can be used in all metals, either in free or forced mattings.

High resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals.

Physical Properties:

Adhesive Type: Anaerobic Methacrylate

Colour: Red Specific Weight (+25°C g/ml): 1.1

Viscosity at +25°C (mPas): 450 - 650Gap Filling: M20 / 0.15 mm Flash Point: > +100°C

Shelf Life: 12 months at 25°C in original unopened packaging

Curing Performance:

Curing rate depends on the assembly clearance, material surfaces and temperature. Functional strength is usually reached in 1-3 hours and full curing takes 24-36 hours. In case of passive surfaces and / or low temperature, a fast cure can be obtained using Loxeal activator 11.

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.

Curing Properties:

Bolt M10 x 20 ZN - quality $8.8 - \text{nut h} = 0.8 \text{ d} \text{ at } +25^{\circ}\text{C}$

Handling cure time: 10 - 20 minute Functional cure time: 1 - 3 hours Full cure time: 5 - 10 hours

Locking torque (ISO 10964):

- Breakaway: 25-35 Nm- Prevailing: 50-65 NmShear Strength (ISO 10123): $15-20 \text{ N/mm}^2$ Temperature range: $-55^{\circ}\text{C to} + 150^{\circ}\text{C}$

Direction for use:

The product is recommended for use on metal surfaces. Clean and degrease parts before bonding with Loxeal **Cleaner**

Apply product to fill the gap completely, assemble parts and hold on for curing time. Liquid product can damage coating, some plastics and elastomers and late stress-cracking events might be induced if used with some thermoplastics. For application on non-metal materials, contact Loxeal Technical Service. For disassembly, use normal tools and eventually heat pieces at +150°C to +250°C, remove any residue of cured product mechanically and clean parts with acetone.

Note:

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