

Preliminary LOXEAL INSTANT 83HT

Description

High viscosity, highly flexible, low adhesive strength instant adhesive based on ethyl cyanoacrylate. This adhesive shows flexibility and sealing properties, still maintaining the fast curing time of a cyanoacrylate. Designed to bond rubbers, plastics, metals and to secure small galvanized, nickel plated, tropicalized screws and plastic fittings when an easy removable or temporary bonding is required. High viscosity to fill large gaps. Delayed curing time to allow the eventual repositioning of parts. The very high elongation of 300-500% allows an excellent resistance to shocks and impacts. Easy to use both manually or through dosing system. Highly resistant to temperature and thermal shock.

Physical properties

Composition:	modified ethyl-cyanoacrylate
Color:	transparent
Viscosity (+25°C - mPa s):	
Spindle 3 – rpm 20	1500 - 3000
Spindle 3 – rpm 2	10000 - 20000
Specific weight (g/ml):	1,1
Gap to fill:	10 - 300 microns
Flash point:	see MSDS
Shelf life:	6 months in unopened packaging
Temperature range:	-50°C/+80°C

Curing properties

Curing rate depends on the substrate used, on the gap, on the temperature and on the environmental humidity.

<u>Substrate</u>	<u>Fixture Time (seconds)</u>
*EPDM	20 - 40
*NBR	4 - 10
*ABS	3 - 8
*STEEL	< 10

In case fixture time is very slow because of low temperatures or moisture, using Loxeal Activator 9 is recommended. If bonding PE, PP, Silicone rubbers or PTFE always prime first with Loxeal Primer 7.

Proprieties of cured material (typical)

Shear strength ISO 4587 (N/mm ²) (Steel/steel +25°C)	1 - 3
Hardness Shore A:	60
Tensile strength DIN 53504 (N/mm ²):	0,1 - 0,5
Elongation at break (DIN 53504):	300 - 500%

Directions for use

1. Clean and degrease all surfaces with Loxeal Cleaner 10 and allow drying before applying the adhesive.
2. For bonding low surface energy plastics such as PE, PP, PTFE, apply Loxeal Primer 7 on bonding surfaces and allow drying.
3. To reduce curing time of some hard to bond rubbers and plastics, using Activator 9 is recommended. After its application on one surface, let it dry. Any surplus adhesive outside the joint can be instantaneously fixed with Activator 9 after assembling.
4. Use the proper bottle to apply the adhesive, avoiding the usage of improper tools. Bring the components together quickly and correctly aligned (fast curing does not allow any repositioning).
5. Apply sufficient pressure for a few seconds to fix the components and clamp them until they are completely fixed.
6. Wait 24-72 hours until full cure before any mechanical stress.

Warnings

This adhesive is not approved for usage neither with pure nor with gaseous oxygen.

Storage

We recommend to store product in a cool and dry place at temperature non-exceeding +20°C. For better and enhanced shelf life, keep product in a refrigerator at +2°C/+7°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 the 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.