

Loxreal 4690

Description

It is a single-part heat cured epoxy adhesive with excellent adhesion to metal surfaces as well as composite materials. The high bond strength of this adhesive allows it to replace mechanical fastening, soldering, brazing or welding. This material requires heat in the range between 150°C and 200°C to cure it.

It has been designed to be non-sagging, allowing the product to be used in large gaps and on vertical surfaces.

Physical properties

Composition:	epoxy	
Colour:	black	
Viscosity (25°C - mPa.s)	250.000 – 1.500.000	
Specific weight (25°C - g/ml):	1,2	
Gap filling:	5 mm	
Shelf life:	6 months between 5°C and 7°C	

Curing performance

Curing time:		
Temperature:	130°	30 – 40 min
	150°	15 – 20 min
Induction:		10 – 20 sec

Actual cure times will depend on the time it takes for the adhesive to reach this temperature - for example, large assemblies or a crowded oven will require longer to reach full cure. Alternative, quicker methods of curing include induction, hotplates, infrared lamps and hot-air guns.

Curing properties

Shear strength(ASTM D-1002):	> 18 N/mm ²
Shear strength(ASTM D-1002):	> 12 N/mm ²
at 150°C	
Peeling strength(ISO 4578)	80-150N/25 mm
Shore D Hardness:	80
Temperature range:	-40 +180°C

Surface preparation

Surfaces should be clean, dry and grease-free before applying the adhesive. Loxreal Cleaner 10 is recommended for the degreasing of most surfaces.

Some metals such as aluminium, copper and its alloys will benefit from light abrasion with emery cloth (or similar), to remove the oxide layer.

Directions for use

The adhesive should be dispensed from the cartridge via the nozzle supplied (this can be cut to give the appropriate sized bead to cover the bond area).

Apply the adhesive to one surface and avoid entrapping air. Assemble parts applying sufficient pressure to ensure the adhesive spreads to cover the entire bond area.

Use a jig / clamp to prevent parts moving during cure.

It is advisable not to disturb the joint until the adhesive is fully cured.

Storage

Keep product in a fridge at a temperature between 5°C and 7°C. To avoid contaminations do not refill containers with used product. For further information on applications, storage and handling contact Loxreal Technical Service

Safety and handling

Consult Material Safety Data Sheet

Note

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