

LOCTITE CR 3502 / LOCTITE CR 4100

November 2013

PRODUCT DESCRIPTION

LOCTITE CR 3502 / LOCTITE CR 4100 provides the following product characteristics:

Technology	Polyurethane
Product Type	PU Adhesive
Cure	Polyaddition
Condition	Solvent-free
Components	Two-component
Application	Assembly
Color (Comp. A)	Yellowish
Color (Comp. B)	Yellowish
Mixing Ratio, by weight Comp. A : Comp. B	100 : 62
Mixing Ratio, by volume Comp. A : Comp. B	100 : 49.2

LOCTITE CR 3502 / LOCTITE CR 4100 is a solvent-free two-component casting resin, based on polyurethane. The resin part (component A) contains organic compounds with hydroxyl groups, the hardener (component B) is based on isocyanates.

By mixing both components in a mix ratio of 100 : 62 a hard elastic casting resin is formed through chemical reaction.

APPLICATION AREAS

LOCTITE CR 3502 / LOCTITE CR 4100 is used as a casting material for dialyzing units.

TECHNICAL DATA

Component A

Loctite CR 3502:

Consistency:	liquid
Density, g/cm ³	0.91 to 1.01
Viscosity, Brookfield - RVT, 20°C, mPa.s * Henkel method 10	800 to 1,600

Component B

Loctite CR 4100:

Consistency:	liquid
Density, g/cm ³	1.16 to 1.26
Viscosity, Brookfield - RVT, 20°C, mPa.s * Henkel method 10	700 to 1,500

Mixture (Component A + B):

Consistency:	liquid
Viscosity at 25°C, mPas Henkel method 11	600 to 1,400
Pot life (180g, 25 °C) , sec* Henkel method 21	330 to 430
Shore A hardness (23 °C) ISO 868	87 to 97

All technical data based on Henkel test method.
Data with * are specified.

DIRECTIONS FOR USE

Preliminary Statement:

Prior to use it is necessary to read the **Material Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed. Please also refer to the local safety instructions and contact Henkel for analytical support.

Pretreatment:

The substrate should be clean, dry, free of dust, oil, grease and other contaminants. The usage of suitable primers on metal surfaces can improve the adhesion and/or the long-term bond stability. The surface of plastic materials should be cleaned, so as to remove any kind of release agents present on the substrate surface. An improvement of the adhesion can be achieved by grinding or sandblasting the surface.

Application:

Adhesive components can be mixed manually by using an electrical hand mixer or by using a two-component dispensing system and inclusion of air must be prevented. After mixing no streaks must be visible. The adhesive is only to be used within a limited time (pot life). After this time the mixture gels up and is not suitable for use. Therefore only the amount that can be applied within the time of pot life should be mixed. The pot life depends on the quantity and temperature of the mixed batch. With larger quantities and an increase in temperature, the pot life decreases. Lower temperatures extend the pot life. Adhesive components should not come into contact with moisture during storage or application. Contact with moisture generates foaming of the adhesive and weakens the bondline. Therefore all packaging should be sealed properly and protected against humidity during storage.

Curing:

LOCTITE CR 3502 / LOCTITE CR 4100 can be cured between 20°C and elevated temperatures (up to 80°C). The curing time will be reduced substantially with increasing temperatures. The addition of chemical catalysts (accelerators) also speeds up the curing reaction (i.e. pot life, open time).

Cleaning:

Fresh, uncured material (cleaning application equipment, substrate contamination etc.) can be removed with LOCTITE SF 8040; cured adhesive can only be removed mechanically.

Classification:

Please refer to the corresponding **Material Safety Data**

Sheets for details on:

Hazardous Information
Transport Regulations
Safety Regulations

Storage**Component A**

Recommended Storage Temperature, °C	15 to 25
Shelf-life (in unopened original packaging)	9 months

Component B

Recommended Storage Temperature, °C	20 to 40
Shelf-life (in unopened original packaging)	9 months

Storage < 20°C or > 40°C can cause irreversible damage to product.

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