

LOCTITE CR 8101 / LOCTITE UK 5400

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PRODUCT DESCRIPTION

LOCTITE CR 8101 / LOCTITE UK 5400 provides the following product characteristics:

Technology	Polyurethane
Product Type	PU Adhesive
Cure	Polyaddition
Condition	Solvent-free
Components	Two-component
Application	Assembly
Color (Comp. A)	Beige
Color (Comp. B)	Dark brown
Mixing Ratio, by weight Comp. A : Comp. B	4 : 1

LOCTITE CR 8101 / LOCTITE UK 5400 is a solvent-free two-component adhesive, 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 4 : 1 a hard elastic casting resin is formed through chemical reaction.

Application Areas:

LOCTITE CR 8101 / LOCTITE UK 5400 is used as well as an adhesive or as a filling, coating and casting. The material shows a good adhesion to metals and synthetic material.

TECHNICAL DATA

Component A

Loctite CR 8101:

Consistency:	liquid
Density, g/cm ³	1.4 to 1.5
Viscosity, Brookfield - RVT, 20°C, mPa.s * Henkel method 10	6,000 to 10,000

Component B

Loctite UK 5400:

Consistency:	thin liquid
Density, g/cm ³	1.17 to 1.27
Viscosity, Brookfield - RVT, 20°C, mPa.s * Henkel method 10	250 to 350

Mixture (Component A + B):

Consistency:	liquid
Viscosity, Brookfield - RVT, 25°C, mPa.s Henkel method 11	2,500 to 2,800
Pot life (120g, 25 °C) , min* Henkel method 20	50 to 70
Final setting time (23°C), days	2 to 3

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:

The filler in LOCTITE CR 8101 will settle upon prolonged storage. The resin must be thoroughly mixed before combining with LOCTITE UK 5400.

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 8101/LOCTITE UK 5400 can be cured at room temperature above 15°C and elevated temperatures (up to 80°C). The curing time can be reduced by increasing the temperature or the addition of the accelerator LOCTITE UK 6100, with the simultaneous reduction of processing time (i.e. pot life, open time) to be observed. While curing there should be adequate contact pressure (load pile, presses, clamps) and fixture hold the joint in place. An adhesive squeeze out along the bond line is a good indication of sufficient adhesive in the joints.

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:

Hazards identification

Transport information

Regulatory information

Storage:

Recommended Storage Temperature, °C	15 to 25
Shelf-life (in unopened original packaging)	12 months

Component B is frost-sensitive.

Storage below 10°C or greater than 50°C can adversely affect product properties.

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