

# LOCTITE UK 8680 B10 / LOCTITE UK 5400

November 2015

## PRODUCT DESCRIPTION

LOCTITE UK 8680 B10 / LOCTITE UK 5400 provides the following product characteristics:

<b>Technology</b>	Polyurethane
<b>Product Type</b>	PU Adhesive
<b>Cure</b>	Polyaddition
<b>Condition</b>	Solvent-free
<b>Components</b>	Two-components
<b>Component A</b>	Resin
<b>Component B</b>	Hardener
<b>Application</b>	Assembly
<b>Color (Comp. A)</b>	Cream, to white
<b>Color (Comp. B)</b>	Brown
<b>Mixing Ratio, by weight Comp. A : Comp. B</b>	5 : 1
<b>Mixing Ratio, by volume Comp. A : Comp. B</b>	3.7 : 1

LOCTITE UK 8680 B10 / 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 weight ratio of 5 : 1 a hard elastic adhesive is formed through chemical reaction. After curing the product exhibits no measurable change in volume.

As natural raw materials (from different cultivation areas) are used a variation in color between different batches is possible.

## APPLICATION AREAS

LOCTITE UK 8680 B10 / LOCTITE UK 5400 is used for bonding of pretreated metals, synthetic materials, hard foams and plastics.

The product is defined to achieve shorter press time conditions by using heated press, compared to more Standard adhesives.

LOCTITE UK 8680 B10 / LOCTITE UK 5400 is principally used in the manufacture of insulated panels in the construction area.

## TECHNICAL DATA

### Component A

#### LOCTITE UK 8680 B10:

Consistency:	liquid
Density, g/cm <sup>3</sup>	1.6 to 1.7
Viscosity, Brookfield - RVT, 23°C, mPa.s * Henkel method 10	10,000 to 20,000

### Component B

#### Loctite UK 5400:

Consistency:	thin liquid
Density, g/cm <sup>3</sup>	1.17 to 1.27
Viscosity, Brookfield - RVT, 20°C, mPas * Henkel method 10	250 to 350

### Mixture (Component A + B):

Consistency:	liquid
Viscosity, Brookfield - RVT, 23°C, mPas Henkel method 11	3,500 to 6,500
Pot life (120g, 23°C), min * Henkel method 20	8.5 to 11.5
Tensile Shear Strength, MPa EN 1465 / Henkel method 40	>10

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:

Component A must be properly and slowly homogenized before use.

## ADDITIONAL INFORMATION

### Disclaimer

#### Note:

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Reference 0.0

Resin and hardener can be mixed manually together and also with stirring application and two-component mixing equipments. The product may be applied by beads applicators and spraying. The product 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 process. Contact with moisture (water vapor) generates foaming of the material and weakens the coating layer. Therefore all packaging should be sealed properly and protected against humidity during storage.

### Curing:

LOCTITE UK 8680 B10 / LOCTITE UK 5400 can be cured between 15 °C and elevated temperatures (up to 70 °C). The curing time will be reduced substantially with increasing temperatures. Also the addition of chemical catalysts (accelerators) speeds up the curing reaction (i.e. potlife, open time).

During curing there should be adequate contact pressure (load pile, presses, clamps) and fixtures to 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:

#### Hazardous Information

#### Transport Regulations

#### Safety Regulations

### Storage

#### Component A

Recommended Storage Temperature, °C	5 to 40
Shelf-life (in unopened original packaging)	12 months
Frost-Sensitive	Yes

#### Component B

Recommended Storage Temperature, °C	15 to 30
Shelf-life (in unopened original packaging)	12 months