

# LOCTITE UK 2015 Component A/B

September 2017

## PRODUCT DESCRIPTION

LOCTITE UK 2015 Component A/B provides the following product characteristics:

<b>Technology</b>	2K-Polyurethane
<b>Product Type</b>	PU Adhesive, structural
<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>Appearance (Comp. A)</b>	Blue
<b>Appearance (Comp. B)</b>	Brown
<b>Appearance (Mixture)</b>	Green
<b>Mixing Ratio, by weight Comp. A : Comp. B</b>	2 : 1
<b>Mixing Ratio, by volume Comp. A : Comp. B</b>	2.5 : 1

LOCTITE UK 2015 Component A/B is a structural 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 2 : 1 a hard elastic product is formed through chemical reaction.

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

LOCTITE UK 2015 Component A/B is a 2 c - polyurethane adhesive for bonding of non-metallic surfaces (plastics, composites, painted metals, etc.). It is especially suitable if structural but elastic adhesive joints shall be realized. LOCTITE UK 2015 Component A/B is provided in a standard version concerning pot life and setting time. Alternative curing characteristics have to be requested.

## APPLICATION AREAS

LOCTITE UK 2015 Component A/B is used as a structural adhesive for fibre reinforced plastics. Mainly used for carbon fibre and glass fibre composite material. Bonding of e-coated steel to e-coated steel or to fibre reinforced plastics (FRP) is a common application. It is recommended to make suitability tests before use.

## TECHNICAL DATA

### IMPORTANT:

This is an experimental product and the relevant Technical Data may change!

### Component A

#### Loctite UK 2015 Component A:

Consistency:	pasty
Density, g/cm <sup>3</sup>	1.11 to 1.15
Viscosity, Brookfield - RVT, 20 °C, Pa.s	200 to 300

### Component B

#### Loctite UK 2015 Component B:

Consistency:	pasty
Density, g/cm <sup>3</sup>	1.4 to 1.44
Viscosity - Brookfield - RVT, 20°C, Pa.s	350 to 500

### Mixture (Component A + B):

Consistency:	pasty
Viscosity - Brookfield - RVT, 20°C, Pa.s	300 to 700

Pot life (240g, 20 °C) , min	6 to 10
Tensile E-modulus, 20 °C, MPa	>300
Elongation 23 °C, %	>90
Tensile Shear Strength, MPa after 7 d at 23 °C	>20
Substrate, gap 0,5 mm	e-coated steel

## 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 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.

**Application instructions for cartridges:**

LOCTITE UK 2015 is contained in a 2.5 : 1 (750+300 ml) cartridge set (components A and B) which also contains a static mixer. To open the cartridges, the metal cap must be removed and the green plug pulled out. The cartridge set is then placed into the suitable compressed-air pistol, e.g. PC COX PPA 1500A 2.5: 1. Apply pressure to the cartridge(s) to ensure a simultaneous and homogeneous flow of both components. Thereafter, attach the static mixer. It is recommended to use Sulzer Mixpac MCH 8-24T, or Nordson OptiMix 8.7-25.

When the pistol handle is actuated, the material is pressed through the static mixer, whereby the two components are automatically mixed. Discard the first 25 mL of extruded adhesive bead, owing to the fact they may not have been mixed correctly. After purging the application should be done without stopping. If the application of adhesive is interrupted for more than 3 minutes at 23° C, the static mixer should be replaced. Otherwise, the increase in viscosity could cause the static mixer to obstruct. At higher processing temperatures interruption times will decrease. LOCTITE UK 2015 is applied directly to the substrates. A homogeneous green color of the leaving adhesive shows the correct mixing as additional control. For the processing equipment that we recommend, the processing pressure should not exceed 5 bars. The parts which are to be bonded must be joined within the specified processing time. Surplus material is to be removed immediately after application. Other packaging are available upon request.

**Curing:**

LOCTITE UK 2015 Component A/B 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 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:**

Freshly applied and uncured material should be removed with a dry Cloth and then cleaned off with a suitable solvent. 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:****Component A**

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

**Component B**

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



## ADDITIONAL INFORMATION

### Disclaimer

#### Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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Reference 0.2