

# LOCTITE UK 8506 B5 / LOCTITE UK 5401

December 2017

## PRODUCT DESCRIPTION

LOCTITE UK 8506 B5 / LOCTITE UK 5401 provides the following product characteristics:

<b>Technology</b>	Polyurethane
<b>Product Type</b>	foaming PU Adhesive
<b>Cure</b>	Polyaddition
<b>Condition</b>	Solvent-free
<b>Components</b>	Two-components
Component A	Resin
Component B	Hardener
<b>Application</b>	Assembly
Appearance (Comp. A)	beige
Appearance (Comp. B)	brown
Mixing Ratio, by weight Comp. A : Comp. B	100 : 28

LOCTITE UK 8506 B5 / LOCTITE UK 5401 is a solvent-free two-component foaming 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 100 : 28 a hard elastic foaming adhesive is formed through chemical reaction.

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

## APPLICATION AREAS

LOCTITE UK 8506 B5 / LOCTITE UK 5401 was especially developed for bonding of sandwich elements in the transport industry.

## TECHNICAL DATA

### Component A

#### Loctite UK 8506 B5 :

Consistency:	pasty
Density, g/cm <sup>3</sup>	1.4 to 1.5

### Component B

#### Loctite UK 5401:

Consistency:	thin liquid
Density, g/cm <sup>3</sup>	1.17 to 1.27

Viscosity - Brookfield - RVT, 20°C, mPas *	250 to 350
Henkel method 10	

### Mixture (Component A + B):

Consistency:	pasty
Viscosity, Brookfield - RVT, 20 °C, mPa.s *	250,000 to 350,000
Henkel method 11	
Foam rise time (20°C), min	≥15 to 25
Final setting time (23°C), days	1 to 2
Foaming rate (23°C)	400 to 500 %

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. After mixing no streaks must be visible. The adhesive is only to be used within a limited time. After this time the mixture starts to foam and is not suitable for use. Therefore only the amount that can be applied within cream time should be mixed. The cream time depends on the quantity and temperature of the mixed batch. With larger quantities and an increase in temperature, the cream time decreases. Lower temperatures extend the cream time. All packaging should be sealed properly and protected against humidity during storage.

### Curing:

LOCTITE UK 8506 B5 / LOCTITE UK 5401 can be cured at room temperature above 15°C and elevated temperatures (up to 60°C). The curing time can be reduced by increasing the temperature, with the simultaneous reduction of processing time (i.e. creamtime, foam

rise 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:

##### Component A

Recommended storage temperature, °C	10 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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