

# LOCTITE UK 8108 / LOCTITE UK 5400

August 2015

## PRODUCT DESCRIPTION

LOCTITE UK 8108 / LOCTITE UK 5400 provides the following product characteristics:

<b>Technology</b>	Polyurethane
Product Type	PU Adhesive
<b>Cure</b>	Polyaddition
Condition	Solvent-free
Components	Two-component
<b>Application</b>	Assembly
Color (Comp. A)	Beige
Color (Comp. B)	Brown
Mixing Ratio, by weight Comp. A : Comp. B	100 : 20
Mixing Ratio, by volume Comp. A : Comp. B	100 : 28

LOCTITE UK 8108 / 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 hardeners (component B) is based on isocyanates.

By mixing both components in a weight ratio of 100 : 20 a hard elastic product is formed through chemical reaction.

## APPLICATION AREAS

LOCTITE UK 8108 / LOCTITE UK 5400 is used for bonding of pretreated metals, synthetic materials and hard foams.

The main application is the production of sandwich elements, e.g. for vehicles, containers, building industry, ships as well as for technical isolations.

## TECHNICAL DATA

### Component A

#### LOCTITE UK 8108:

Consistency:	liquid
Density (20°C), g/cm <sup>3</sup>	1.65 to 1.75
Viscosity, Brookfield - RVT, 20°C, mPa.s * Henkel method 10	19,000 to 25,000

### Component B

#### LOCTITE UK 5400:

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

### Mixture (Component A + B):

Consistency:	liquid
Pot life (25°C), min *	100 to 150
Open Time, (23°C, 50% rh) min	150 to 210
Final setting time (23°C), days	5 to 7

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 resin component contains fillers which may settle during storage. To ensure a homogenous product, the use of a mixer to hold the fillers homogenous in the product is recommended. This is especially requested when processing with 2C mixing units and dosing systems. In case of long processing breaks, the system should be relieved, as

additional pressure reinforces the settlement of the the fillers. Adhesive components can be mixed manually, with stirring application or two-component mixing equipment. The product may be applied by spatula, rolling, pouring or spraying. 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 (water vapour) generates foaming of the adhesive and weakens the bondline. Therefore all packaging should be sealed properly and protected against humidity during storage.

#### Curing:

LOCTITE UK 8108 / LOCTITE UK 5400 can be cured between 15 °C and elevated temperatures (up to 60 °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	10 to 50
Shelf-life (in unopened original packaging), 12 months	
Frost-Sensitive	No

##### Component B:

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

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

## 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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