

LOCTITE UK 1366 B10 / LOCTITE UK 5452

April 2014

PRODUCT DESCRIPTION

LOCTITE UK 1366 B10 / LOCTITE UK 5452 provides the following product characteristics:

Technology	Polyurethane
Product Type	Structural Adhesive
Cure	Polyaddition
Condition	Solvent-free
Components	Two-components
Component A	Resin
Component B	Hardener
Application	General assembly
Appearance (Comp. A)	beige
Appearance (Comp. B)	green
Mixing Ratio, by weight Comp. A : Comp. B	4.7 : 1
Mixing Ratio, by volume Comp. A : Comp. B	4 : 1

LOCTITE UK 1366 B10 / LOCTITE UK 5452 is a solvent-free, two-component structural 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 4.7 : 1, a hard elastic two-component structural adhesive is formed through chemical reaction.

After curing the product does not show any measurable change in volume. Due to the use of natural raw materials (depending on cultivation areas), a variation in color between different batches is possible.

APPLICATION AREAS

LOCTITE UK 1366 B10 / LOCTITE UK 5452 is used for bonding pretreated metals, plastics and hard foams. In individual cases the product might also be used on non-pretreated metals. This does, however, require intensive technical training, incl. a test of the metal quality.

TECHNICAL DATA

Component A

Macroplast UK 1366 B10:

Consistency: pasty
Density, g/cm³: 1.35 to 1.45

Component B

LOCTITE UK 5452:

Consistency: pasty
Density, g/cm³: 1.21 to 1.26

Mixture (Component A + B):

Consistency: pasty
Viscosity at 20°C, mPas: 400,000 to 500,000
Brookfield RVT, Henkel method 11

Pot life (244g, 20 °C), min: 7 to 13
Henkel method 20
Initial setting time (23 °C), min: 40 to 60
Final setting time (23°C), days: 2 to 3
Consumption, g/m²: 200 to 500 (depending on substrate) on
Tensile shear strength, MPa *: > 10
EN 1465 / , Henkel method 40
In service temperature, °C: -40 to +80

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 are applied with an appropriate cartridge system. 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 the 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 1366 B10 / LOCTITE UK 5452 can be cured between 15°C and elevated temperatures (up to 60 °C). The curing time will be reduced substantially with increasing temperatures. While 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	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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