

LOCTITE UK 8458 / LOCTITE UK 5401

October 2019

PRODUCT DESCRIPTION

LOCTITE UK 8458 / LOCTITE UK 5401 provides the following product characteristics:

Technology	Polyurethane
Product Type	PU Adhesive
Cure	Polyaddition
Condition	Solvent-free
Components	Two-component
Application	Assembly
Appearance (Comp. A)	beige
Appearance (Comp. B)	brown
Mixing Ratio, by weight Comp. A : Comp. B	100 : 53
Mixing Ratio, by volume Comp. A : Comp. B	100 : 47

LOCTITE UK 8458 / LOCTITE UK 5401 is a solvent-free two-component coating compound, 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 : 53 a hard elastic coating compound 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 8458 / LOCTITE UK 5401 is used for coatings, e.g. underbody protection for trailers.

TECHNICAL DATA

Component A:

Consistency:	thin liquid
Density, g/cm ³	1.03 to 1.13
Viscosity, Brookfield - RVT, 20 °C, mPa.s	400 to 600

Component B

Loctite UK 5401:

Consistency:	thin liquid
Density, g/cm ³	1.17 to 1.27
Viscosity - Brookfield - RVT, 20°C, mPa.s *	150 to 350
M-10	

Mixture (Component A + B):

Consistency:	thin liquid
Pot life (153g, 20 °C) , sec* M-20	15 to 23
Final setting time (23°C), days	1
Shore D hardness (20°C)	70 to 80
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 mixed together shortly before application in the given ratio, until a homogeneous mixture evolves. The coating compound is only to be used within a limited time (potlife). 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 potlife should be mixed. The potlife depends on the quantity and temperature of the mixed batch. With larger quantities and an increase of temperature, the potlife decreases. Lower temperatures extend the potlife. If the amount of hardener is overdosed, the viscosity of the mixture will be lower and the adhesive film will become brittle. Due to its short potlife, LOCTITE UK 8458 / LOCTITE UK 5401 will only be applied using machinery with two-component application equipment. Adhesive components should not come into contact with moisture during the storage or application. Contact with moisture (water vapor) generates foaming of the coating compound and weakens the bondline. Therefore all packaging should be sealed properly and have to be protected against the humidity during storage.

Curing:

LOCTITE UK 8458 / LOCTITE UK 5401 can be cured between 15°C and elevated temperatures (up to 60 °C). The curing time will be reduced substantially with increasing

temperatures. The addition of chemical catalysts (accelerators) also speeds up the curing reaction (i.e. pot life, open time).

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:

Recommended Storage Temperature, °C	15 to 25
Shelf life (in unopened original packaging)	12 months

Component B is frost-sensitive.

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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

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. 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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage: [Except as otherwise noted] All trademarks in this document are trademarks and/or registered trademarks of Henkel and its affiliates in the U.S. and elsewhere.

Reference 0.1