

LOCTITE UR 7220

April 2013

PRODUCT DESCRIPTION

LOCTITE UR 7220 provides the following product characteristics:

Technology	Polyurethane
Product Type	PU Adhesive
Cure	Humidity
Condition	Solvent-free
Components	One-component
Application	General assembly
Color	Brown

LOCTITE UR 7220 is a solvent-free, moisture curing one component adhesive based on polyurethane. At room temperature and the required humidity in the joint sufficient strength will be obtained after approximately 6 to 10 hours. For faster curing LOCTITE UR 7220 can be cured in a heated press. Maximum temperature must not exceed 70°C.

Application Areas

LOCTITE UR 7220 is used for the manufacture of sandwich elements with porous substrates (e.g. wood) which contain humidity.

The substrates can be bonded to one another or to metals, laminated panels, various plastics, rigid foams made of polystyrene, polyurethane and others.

TECHNICAL DATA

Loctite UR 7220:

Consistency:	liquid
Density, g/cm ³	~1.15
Viscosity, Brookfield - RVT, 20°C, mPa.s * Henkel method 10	5,500 to 10,500
Open Time, at 23°C, 50% rh, hours	4 to 6
Initial strength, hours	6 to 10
Final strength, days	3
Consumption, g/m ²	100 to 200
Tensile shear strength at -40 °C, MPa	>7
Tensile shear strength at 20 °C, MPa	>6
Tensile shear strength at 80 °C, MPa EN 1465 (wood / wood bonding)	>3
In service temperature, °C	-40 to 80
Short exposure (up to 1 h), °C	100

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:

Application Temperature : 10 to 35 °C.

LOCTITE UR 7220 is applied to the substrate by spatula or doctor blade, but can also be applied by spraying or rolls.

When bonding substrates without sufficient humidity or which are not moisture permeable, the required amount of moisture has to be provided by other methods.

A proven procedure is the combined spraying of the adhesive simultaneously with water in a fine mist.

In the case of separate adhesive and water mist application, the water must not be sprayed onto the bare metal but on the other substrate or ideally on the adhesive.

Bonding surfaces should be brought together immediately after adhesive application, assuring sufficient contact pressure while curing, preferably in a press.

Since LOCTITE UR 7220 cures by reaction with humidity, open containers must always be properly sealed and protected against moisture immediately after taking out the quantity needed.

For the same reason we recommend to use up opened containers as soon as possible.

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:

When properly stored in a cool, dry location, with the container tightly closed when not in use, this product will have a shelf life of at least 9 months.

Recommended Storage: 15°C to 25°C. Storage below 10°C or greater than 50°C can adversely affect product properties. LOCTITE UR 7220 is frost-sensitive.

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 of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 0.0

Henkel AG & Co. KGaA
40191 Düsseldorf, Germany
Phone: +49-211-797-0

Henkel Corporation USA
Madison Heights, MI 48071
Phone: +1-248-583-9300

Henkel (China) Co. Ltd.
201203 Shanghai, China
+86.21.2891.8000

For more information, please contact us on www.henkel.com