



LOCTITE[®] UR 3371

December 2021

PRODUCT DESCRIPTION

LOCTITE[®] UR 3371 provides the following product characteristics:

Technology	Polyurethane
Chemical Type	Polyurethane
Appearance	Grey, Black, White
Viscosity	Paste
Cure	Moisture
Application	Sealing
Application Temperature	5 to 38°C (40 to 100 °F)
In service temperature	-30 to 80°C (-22 to 175°F)
Specific Benefits	<ul style="list-style-type: none"> • Excellent elasticity • Very good sag resistance • High initial tack • Non-corrosive • Good paint compatibility • Good resistance to UV-ageing and weathering • Good adhesion to raw metal sheet, EC paint, top-coat paint, and plastics

LOCTITE[®] UR 3371 is a one component sealant based on Polyurethane, which cures by reaction with humidity to an elastic product. Skin formation and curing times depend on humidity and temperature. In addition, the curing time also depends on the layer thickness. By increasing the temperature and humidity, the reaction time can be reduced. Low temperature as well as low humidity retards the process.

Typical applications include sealing of metals and plastics, e.g. sidepanelling and bonding of the roof skin in the vehicle and caravan manufacture, and elastic, interior and/or exterior seam and joint sealing in the following area such as vehicle body, caravan, railway carriage, container and general metal construction; electrical, plastics, air-conditioning and ventilation industries

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 23 °C	1.08
Extrusion Rate, g/min, 60 seconds @ 23 °C:	
Pressure 0.6 MPa	300

TYPICAL CURING PERFORMANCE

Under normal conditions, the atmospheric moisture initiates the curing process. The product develops functional strength in 24 hours and fully cures in 7 days.

Curing Properties

Curing @ 23 °C, 50%RH	
Cure Rate @ 24 hours, mm	3

Skin Over Time

Skin over time is the time the surface of adhesive forms a skin upon exposure to atmospheric moisture at 23°C/50% RH

Skin Over Time, minutes	40
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Tack Free Time

Tack Free Time, minutes	50 to 70
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TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 7 days @ 23°C, 50% RH

Physical Properties

Shore Hardness, ASTM D 412, Durometer A	50
Elongation, at break, ASTM D 412, %	>300
Tensile Strength, ASTM 412C	N/mm ² >2.5 (psi) (360)

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

Directions for use:

Surface Preparation:

1. For best performance, the substrate must be clean, dry, oil- and grease free.
2. Depending on the substrate it may be necessary to roughen the surface or to use a primer to provide best adhesion.
3. When manufacturing plastics, external release agents are often used; these agents must be removed prior to bonding or sealing.
4. When bonding and sealing PMMA and polycarbonate under tension, stress corrosion cracking may occur. Application trials before use are necessary.



Application:

1. Material in cartridges can be applied with Loctite® pneumatic or manually operated pressure guns.
2. Material in foil sausage packs can be applied with FK Hand or Pneumatic air pressure dispense guns.
3. Both systems require between 2-5 bar (30-70 psi) air pressure.
4. Lower temperatures will make product thicker and harder to dispense. Best practice to bring material to room temperature prior to dispensing.
5. Moisture curing begins immediately after the product is exposed to the atmosphere, therefore parts to be assembled should be mated within a few minutes after the product is dispensed.
6. The bond should be allowed to cure (e.g. seven days), before subjecting to heavy service loads.
7. Low material temperatures of the sealant will lead to an increase of viscosity, resulting in a lower extrusion rate. This can be avoided by bringing the sealant up to room temperature prior to application.
8. LOCTITE® UR 3371 can also be applied from pails or drums with high pressure pumps with follower plates.
9. High and low levels of relative humidity will have an impact on the cure speed.

Cleaning:

1. Excess uncured material can be wiped away with non-polar solvents or Loctite® brand cleaners.
2. Cured material can be removed mechanically.

Painting:

1. After skin formation LOCTITE® UR 3371 can be painted with usual commercial available paints.
2. Early overpainting does not inhibit curing but slows down the curing process.
3. Overpainting should be carried out within 3 days max.
4. Considering the great variety of paint systems available, sufficient trials should always be carried out to confirm suitability of our product.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling. **Optimal Storage: 5 to 25°C. Storage below 5°C or greater than 25°C can adversely affect product properties.** Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact Henkel.

Product Specification

The technical data contained herein are intended as reference only and are not considered specifications for the product. Product specifications are located on the Certificate of Analysis or please contact Henkel representative.

Approval and Certificate

Please contact your local Henkel representative for related approval or certificate of this product.

Data Ranges

The data contained herein may be reported as a typical value. Values are based on actual test data and are verified on a periodic basis.

Temperature/Humidity Ranges: 23°C/50% RH = 23±2°C/50±5% RH.

Conversions

(°C x 1.8) + 32 = °F
 kV/mm x 25.4 = V/mil
 mm / 25.4 = inches
 µm / 25.4 = mil
 N x 0.225 = lb
 N/mm x 5.71 = lb/in
 N/mm² x 145 = psi
 MPa x 145 = psi
 N·m x 8.851 = lb·in
 N·m x 0.738 = lb·ft
 N·mm x 0.142 = oz·in
 mPa·s = cP

Disclaimer

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.

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Reference 1