Technical Data Sheet

# LOCTITE ABLESTIK 286

October 2014

## PRODUCT DESCRIPTION

LOCTITE ABLESTIK 286 provides the following product characteristics:

| | |
|---|---|
| **Technology (Part A)** | Epoxy |
| **Technology (Part B)** | Amine |
| Appearance - Part A | White paste |
| Appearance - Part B | White paste |
| Product Benefits | • Two component<br>• Easy mix ratio<br>• Thermally conductive<br>• Room temperature cure<br>• Thixotropic |
| Components | Two components - requires mixing |
| Mix Ratio, by volume - Part A: Part B | 100 : 100 |
| Mix Ratio, by weight - Part A: Part B | 100 : 180 |
| **Cure** | Room temperature cure |
| **Application** | Assembly, Non electrically conductive adhesive |
| Key Substrates | Most metals and Most plastics |
| Operating Temperature Range | -55 to 105ºC |

LOCTITE ABLESTIK 286 offers the proper amount of thixotropy to assure minimum flow without sacrificing wetting. It is ideal for use in piping applications and on a wide variety of maintenance and production requirements.

LOCTITE ABLESTIK 286 is also available in the color blue.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

**Part A Properties ECCOBOND 286**

| | |
|---|---|
| Density, ASTM D792, g/cm³ | 1.21 |

**Part B Properties ECCOBOND 286**

| | |
|---|---|
| Density, ASTM D792, g/cm³ | 2.0 |

**Mixed Properties**

| | |
|---|---|
| Density, ASTM D792, g/cm³ | 1.71 |
| Work Life (100 g) @ 25 °C, minutes | 30 |
| Shelf Life @ 25ºC , days | 365 |
| Flash Point - See SDS | |

## TYPICAL CURING PERFORMANCE

**Cure Schedule**

24 hours @ 25°C
4 hours @ 45°C
2 hours @ 65°C

For optimum performance, follow the initial cure with a post cure of 2 to 4 hours at maximum expected operating temperature.

The above cure profiles are guideline recommendations. Cure conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

## TYPICAL PROPERTIES OF CURED MATERIAL

**Physical Properties**

| | |
|---|---|
| Coefficient of Thermal Expansion , ASTM D3386, ppm/°C | 36 |
| Thermal Conductivity , ASTM D2214, W/(m-K) | 1.04 |

**Electrical Properties**

| | |
|---|---|
| Volume Resistivity @ 25 °C, ASTM D257, ohm-cm | $1\times10^{15}$ |

## TYPICAL PERFORMANCE OF CURED MATERIAL

**Miscellaneous**

| | | |
|---|---|---|
| Flexural Strength, ASTM D790 | N/mm² (psi) | 83 (12,000) |
| Tensile Lap Shear Strength , ASTM D1002, Al to Al @ 25 °C | N/mm² (psi) | 15.2 (2,200) |

## GENERAL INFORMATION

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

## DIRECTIONS FOR USE

1. Complete cleaning of the substrates should be performed to remove contamination such as oxide layers, dust, moisture, salt and oils which can cause poor adhesion or corrosion in a bonded part.
2. Some filler settling is common during shipping and storage. For this reason, it is recommended that the contents of the shipping container be thoroughly mixed prior to use. Power mixing is preferred to ensure a homogeneous product.
3. Accurately weigh resin and hardener into a clean container in the recommended ratio. Weighing apparatus having an accuracy in proportion to the amounts being weighed should be used.
4. Blend components by hand, using a kneading motion, for 2 to 3 minutes and scrape the bottom and sides of the mixing container frequently to produce a uniform mixture.

5. If possible, power mix for an additional 2 to 3 minutes. Avoid high mixing speeds. This can entrap excessive amounts of air. It can also cause overheating of the mixture, resulting in reduced working life.
6. Apply adhesive to all surfaces to be bonded and join together.
7. In most applications only contact pressure is required.
8. Certain resins and hardeners are prone to crystallization. If crystallization does occur, warm the contents of the shipping container to 50 to 60ºC until all crystals have dissolved. Shipping container must be loosely covered during the warming stage to prevent any pressure build-up.

**Not for product specifications**
The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

**Storage**
Store in original, tightly covered containers in clean, dry areas. Storage information may be indicated on the product container labeling.

**Optimal Storage : 25 °C**

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 your local Technical Service Center or Customer Service Representative.

**Conversions**
(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm² x 145 = psi
MPa = N/mm²
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**

**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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Reference 0.1