

ECCOBOND 286 Parts AB

July 2013

PRODUCT DESCRIPTION

ECCOBOND 286 Parts AB 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	<ul style="list-style-type: none"> • Two component • Easy mix ratio • Thermally conductive • Room temperature cure • 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 105°C

ECCOBOND 286 Parts AB 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.

ECCOBOND 286 Parts AB 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 @ 25°C, days 365

Flash Point - See MSDS

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 1×10¹⁵

TYPICAL PERFORMANCE OF CURED MATERIAL

Miscellaneous

Flexural Strength, ASTM D790 N/mm² 83
(psi) (12,000)

Tensile Lap Shear Strength, ASTM D1002, Al to Al @ 25 °C N/mm² 15.2
(psi) (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 which could entrap excessive amounts of air or 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 60°C 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

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} = \text{N/mm}^2$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

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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