



ECCOBOND A304-6P2

December 2009

PRODUCT DESCRIPTION

ECCOBOND A304-6P2 provides the following product characteristics:

Technology	Epoxy
Appearance	Light blue
Product Benefits	• Non-conductive • Non-sag • One component • Fast cure • Good toughness • Excellent chemical resistance
Operating Temperature	-40 to 155°C
Cure	Heat cure
Application	Adhesive and Sealant
Typical Package Application	End cap adhesive for hydraulic oil and high temperature industrial/aerospace filters

ECCOBOND A304-6P2 epoxy adhesive and sealing compound is designed for high throughput assembly operations. ECCOBOND A304-6P2 is a thixotropic version of ECCOBOND A304-6.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity @ 25°C, 15 s⁻¹, mPa·s (cP) 30,000 to 45,000

Shelf Life @ 0 to 8°C (from date of manufacture), months 6

Density, g/cm³ 1.48 to 1.54

Flash Point - See MSDS

TYPICAL CURING PERFORMANCE

Cure Schedule

1 hour @ 120°C

30 minutes @ 160°C

15 minutes @ 180°C

This product generates moderate heat during cure. No adverse exotherm effects are obtained when cured at 160°C in masses up to approximately 30 grams.

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 Linear Thermal Expansion, ppm/°C:

1 hour @ 120°C

Below T_g 41

Above T_g 135

Glass Transition Temperature (T_g) by TMA, °C:

1 hour @ 120°C

105 to 115

Hardness Shore D:

@ 25°C, minimum 80

@ 125°C, minimum 50

Thermal Conductivity, W/mk 0.44

Flexural Modulus:

@ 25 °C N/mm² 2,200 to 3,800
(psi) (319,083 - 551,143)

Resistance, 200 hours @ 125°C:

Skydrol 500 No attack

7808 Hydraulic Oil No attack

Electrical Properties:

Volume Resistivity, ohms-cm 1×10¹⁴

Dielectric Strength, kV/mm 15.3

TYPICAL PERFORMANCE OF CURED MATERIAL

Tensile Lap Shear Strength, MPa:

@ 25°C, (minimum) 11

GENERAL INFORMATION

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

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 product in the unopened container in a dry location. Storage information is indicated on the product container labeling.

Optimal Storage: 0 to 8°C. Storage below 0°C or greater than 8°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 your local Technical Service Center or Customer Service Representative.



Conversions

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

Note

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Reference 0.0