



HYSOL[®] ES2207[™]

September 2007

PRODUCT DESCRIPTION

HYSOL[®] ES2207[™] provides the following product characteristics:

Technology	Epoxy
Appearance (Part A)	Black
Appearance (Part B)	Amber
Appearance (cured)	Black
Components	Two component - requires mixing
Mix Ratio, by volume - Part A: Part B	4 : 1
Mix Ratio, by weight - Part A: Part B	100 : 15.8
Cure	Room temperature cure
Application	Potting and Encapsulating

HYSOL[®] ES2207[™] is a filled, resilient, low viscosity, room temperature cure epoxy potting compound. This material has excellent adhesion to many substrates, and has good surface appearance. It will meet UL 94 V-0 requirements in 1/8 inch thickness.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Part A Properties

Density, @ 25 °C, g/cm ³	1.68
Solids Content, %	100
Filler Content, %	47
Viscosity, Brookfield - RVF, 25 °C, cP:	
Spindle, speed r/min	14,000

Part B Properties

Density, @ 25 °C, g/cm ³	1.0
Solids Content, %	100
Filler Content, %	0
Viscosity, Brookfield - RVF, 25 °C, cP:	
Spindle, speed r/min	180

Mixed Properties

Pot Life, 200 gm mass, @ 25 °C, minutes	90
Viscosity, Brookfield - RVF, 25 °C, cP:	
Spindle, speed r/min	8,800

TYPICAL CURING PERFORMANCE

Recommended Curing Conditions

- 24 hours @ 25 °C (Recommended cure)
- 2 hours @ 60 °C (Alternate cure)

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties:

Coefficient of Linear Thermal Expansion, ppm/°C:	
Alpha 1, Below Tg @ -20 to 30 °C	66.3
Alpha 2, Above Tg @ 60 to 100 °C	159.1
Flammability, 3mm, 94V-0	Passes
Tensile Strength, psi	1,400
Elongation, %	20

Electrical Properties:

Dielectric Strength, 10 mils thickness, volts/mil	1,000
Volume Resistivity, ohms-cm	1.5×10 ¹⁴
Surface Resistivity, ohms	1.5×10 ¹⁴
Dielectric Constant / Dissipation Factor @ 25°C:	
100 Hz	5.4 / 0.081
1 kHz	4.9 / 0.055
100 kHz	4.3 / 0.037

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.

Note: Before using this product please purge approximately 30 ml. of material prior to application. Discard purged material in accordance with the Material Safety Data Sheet. A video instruction is available upon request.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Liquid Storage - Liquids should be stored at 23°C or below, in closed containers. If stored below 23°C, the material MUST be allowed to come to room temperature, in the sealed container, to avoid moisture contamination.

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/mm ² 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

Note

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



Technologies

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Reference 1.1