



# HYSOL<sup>®</sup> ES2500<sup>™</sup>

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## PRODUCT DESCRIPTION

HYSOL<sup>®</sup> ES2500<sup>™</sup> provides the following product characteristics:

<b>Technology</b>	Epoxy
Appearance (Part A)	Black
Appearance (Part B)	Amber - green
Components	Two component - requires mixing
Mix Ratio, by volume - Part A: Part B	2 : 1
Mix Ratio, by weight - Part A: Part B	100 : 29.5
<b>Cure</b>	Room temperature cure
<b>Application</b>	Potting and Encapsulating

HYSOL<sup>®</sup> ES2500<sup>™</sup> is a resilient, low cost, fast gelling, potting compound. Designed for easy 2 to 1 meter-mix-dispense machinery and low abrasion. This material is ideal for potting and encapsulating high volume parts.

HYSOL<sup>®</sup> ES2500<sup>™</sup> meets UL 94 HB Flame Retardant to 1.5mm thickness.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

### Part A Properties

Density, @ 25 °C, g/cm <sup>3</sup>	1.63
Viscosity @ 25 °C, cP	11,000

### Part B Properties

Density, @ 25 °C, g/cm <sup>3</sup>	0.97
Viscosity @ 25 °C, cP	170

### Mixed Properties

Density, @ 25 °C, g/cm <sup>3</sup>	1.41
Viscosity @ 25 °C, cP	1,500
Pot Life @ 25 °C, minutes:	
400 g mass	10
Gel Time @ 25 °C, minutes:	
400 g mass	25

## TYPICAL CURING PERFORMANCE

### Recommended Curing Conditions

16 hours @ 25 °C (Recommended cure)
2 hours @ 66 °C (Alternate cure)

## TYPICAL PROPERTIES OF CURED MATERIAL

### Physical Properties:

Glass Transition Temperature, °C	2
Coefficient of Thermal Expansion, ppm/°C:	
Pre Tg (Alpha 1)	65
Post Tg (Alpha 2)	150
Thermal Conductivity, W/mk	0.288
Shore Hardness, Durometer D	70
24 Hour Water Moisture Absorption, %	0.3
Tensile Strength, psi	1,300
Exotherm Temp, 300 grams @ °C	102

### Electrical Properties:

Dielectric Strength, 10 mils thickness, volts/mil	410
Arc Resistance, seconds	87
Volume Resistivity, ohm/cm @ 25°C	1.5×10 <sup>14</sup>
Dielectric Constant / Dissipation Factor @ 25°C:	
100 Hz	4.2 / 0.08
1 kHz	4.0 / 0.04
100 kHz	3.7 / 0.03

## 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 <sup>2</sup> 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**

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Reference 1.1