



POLYCAST INDUSTRIES, INC.
 130 South 2nd Street • N. Bay Shore, NY 11706
 631-595-2530 • Fax: 631-595-2537 • 800-486-3512
 www.polycastindustries.com • info@polycastindustries.com

POLYCAST-159

UL 94V0 RATED EPOXY COMPOUND, ROOM TEMPERATURE CURE

DESCRIPTION

PC 159 is a 100% solids epoxy system. It is a filled, low cost, general purpose epoxy encapsulant. PC 159 is designed in such a way that the mix ratio is 1:1 by volume. It is a room temperature cure, has excellent moisture resistance, and is also machine dispensable. This material is REACH and RoHS compliant and does not contain any hazardous substances. PC 159 conforms to the UL 94V0 rating – **UL File No. E164275**

PROPERTIES – UNCURED

	(Part A)	Part B
Color , visual	Black	Neutral
Viscosity, ASTM-D-2393 (c.p.s. @ 25° C)..	7-10,000	5-7000
Specific Gravity	1.4	1.5
Mix Ratio (volume).....	1:1	
Mixed Viscosity, ASTM-D-2393 (@ 25° C)	5-8000	
Pot Life @ 25°C (100 grams).....	90 minutes	
Shelf Life @ 70° F	12 months	

PROPERTIES – CURED

Hardness, ASTM-D-2240(Durometer).....	Shore D 82
Tensile Strength, ASTM-D-638	8,500 psi
Tensile Elongation, ASTM-D-638	6 %
Compressive Strength ASTM-D 695.....	9,000 psi
Flexural Strength, ASTM-D-790.....	9,500 psi
Coefficient of Thermal Expansion	56 x 10 ⁻⁶
Heat Distortion Point.....	80°C
Water Absorption.....	0.08%
Dielectric Strength, ASTM-D-149 (volts/mil)	420
Dielectric Constant, ASTM-D-150	3.5
Dissipation Factor, ASTM-D-150.....	0.03
Volume Resistivity, ASTM-D-257 (ohm-cm).....	1 x 10 ¹⁵
Thermal Conductivity, (BTU*in)/(hr*ft ² *°F).....	6
Basic Operating Temperature (°C).....	-40 - 130

MIXING INSTRUCTIONS

Pre-mix Part A and Part B separately. Then measure 1:1 by volume (A to B). Mix thoroughly scraping the sides and bottom of the container. Evacuate and then pour into mold or cavity.

CURE SCHEDULE

Room temperature cure @75°F with full properties after 24 hours.
 To accelerate cure, allow 2 hours @ room temperature, then 2 hours @ 125°F.