

Set-Bond 839

Set-Bond 839 is a 100% solids epoxy system. It is a filled, thixotropic paste compound with adjustable Flexibility offering good mechanical bond, peel strength and thermal shock resistance.

It also has good adhesion to glass, ceramics, most metals and plastics. It can be cured at room temperature or at elevated temperatures.

Properties-Uncured:

Color, Visual
Mixed Viscosity, cps
Specific Gravity
Mix Ratio, by weight

Part A

White
Paste
1.15
1 to 1 RIGID
1 to 2 SEMI- RIGID
1 to 3 FLEXIBLE
45 to 60 mins
6 months

Part B

Amber/Neutral

Pot Life @25 °C

Shelf Life @25 °C

Physical Properties-Cured:

Durometer (Shore D)
Flexural Strength, psi
Tensile Strength, psi
Tensile Elongation, %
Lap Shear Strength, psi
Service Temperature °C

45-80 varies with ratio
5,800
5,500
2-10
3000
105

Electrical:

Dielectric Strength, volts/Mil
Dielectric Constant, 60hz
Dissipation Factor, 60hz
Volume Resistivity, ohm-cm
Thermal Conductivity, btu-in/(ft²)(hr)(°F)

405
3
0.002
1 x 10¹⁴
1.6

Mixing Instruction:

1. Pre-mix both components in their original containers to insure consistency.
2. Measure out equal parts (by weight) of both components.
3. Mix thoroughly, scraping the sides and bottom of container
4. Evacuate @29in. Hg for void-free casting.
5. Pour into unit or cavity.

Cure Schedule: 16 to 24 hours at Room Temperature, 4-6 hours at 55 °C, 30 minutes at 80 °C, or 15 minutes at 105 °C. Note ultimate properties attained after 4-6 days at room temperature (25 °C)

Warranty

Silicone & Epoxy Technology NY, Inc. accepts no liability, in negligence or otherwise, in this communication. Under no circumstances shall the company be liable for incidental, consequential or other damages from alleged negligence, breach of warranty, strict liability or any other theory, arising out of the use or handling of this product. The sole liability shall be the purchase price of the product. You should test the material to determine if the material is suitable, and/or claims are valid, in your particular circumstances. None of the possible or suggested uses of the materials in this communication are licensed under any Silicone & Epoxy Technology patent covering such use or a recommendation for use of such materials in the infringement of any patent.