

ANCHOR SEAL
Product # SY5820

Epoxy 2-Component

Features:

High thermal conductivity
Low shrinkage, low stress
Low thermal expansion
SMD compatible

Applications:

Electrical Encapsulation
Insulators & bushings
Power supplies
Surface mount devices

Mixing & Curing Instructions:

Mix Ratio: 100 Parts A to 8 Parts B by wt.

Cure Schedule: 4-16 hours @ 77°F. or
1-3 hours @ 120-170°F.
Cure time is dependent on volume mixed.

Properties @ 77°F, Uncured:

Pot Life, 100 grams, minutes..... 45
Viscosity, CPSPart A ... 60,000 Part B ... 300
Viscosity, A:B Mixed, CPS..... TBD
Specific Gravity, Grams/CC... Part A 2.25-2.35Part B 1.02
Shelf life, factory sealed cans, years..... 2
Note: Part A contents may settle in storage. Stir thoroughly before use

Physical Properties @77°F, Cured:

Color..... Black
Durometer (Hardness) Shore D..... 78-83
Specific Gravity, grams/cc..... 2.21
Tensile Strength, PSI..... 6,000
Tensile Elongation, %..... 10
Compressive Strength, PSI..... 10,000
Moisture Absorption, 7 days @ 25°C, %..... TBD
Thermal Cond. (Btu)(in)/ft²(hr)(°F)..... 8-9
Thermal Expansion, linear, cm/cm/°C (10⁻⁶)..... 32
Service Temperature, °C..... -50 to 100

Electrical Properties @ 77°F, Cured:

Dielectric Strength, ASTM D149, volts/mil..... 400
Dielectric Constant, ASTM D150, 1 KHz 5.5
Dissipation Factor, ASTM D150, 1 KHz 0.02
Volume Resistivity, ohm/cm..... 2 x 10¹⁵

-more-

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IMPORTANT INFORMATION: READ BEFORE USING PRODUCT

Directions for use: *Stir contents prior to use.* Because of differences in density, *pigments and fillers, when present, may separate* from the liquid components during storage. To insure product homogeneity and maximum performance, check the containers for settling. If settling is evident, loosen any settled pigments from the bottom of the container with a screw driver or similar object. Hand stir the contents with a metal mixing stick, or power mix at slow speed with a drill press and dispersion blade. *This product might crystallize* in its shipping container during storage. If it appears hard, or has a granular consistency, or if it is normally clear but appears cloudy, warm it thoroughly at 120°F to reconstitute. Remix the product and allow it to cool back to room temperature before using.

Measuring: Carefully weigh Part A and Part B components with an accurate scale. If measuring volumetrically, use precise metering pumps, graduated/pre-marked containers or pre-measured kits. Place the correct proportions of Part A and Part B into a straight-sided container. **Note:** Altering the mix ratio from what is specified on the data sheet is not recommended. Cured properties could be adversely affected.

Mixing: Mix thoroughly with a flat-ended stick or a slow speed drill press with a dispersion blade. Scrape the sides and bottom occasionally to assure a thorough blend. Do not whip excessive air into the mixture. To guard against partially cured sections, never apply material *scraped* from the sides of the original mixing container. For best results, transfer the mixture into a second container and stir it again before application. This will help insure consistent properties and maximum performance.

De-airing: Low viscosity resins will de-air naturally on their own. Some applications require a totally air-free product. If a vacuum pump and chamber are used, evacuate the material for 5-15 minutes @ 28-29 inches of mercury. Allow sufficient space above the liquid for expansion, about four times the liquid volume. Resins slightly warmed are thinner and will de-air faster. Also, the use of an air-out additive will lower the surface tension and hasten air release. **Caution:** Warming a catalyzed mixture will shorten the pot life and decrease gel time.

Handling Cautions: Review the Material Safety Data Sheet before using this product.

Warning: For Industrial Use Only. All chemicals must be handled with care. Avoid breathing fumes, mists and dust, they could cause respiratory discomfort or damage. Work in a well-ventilated area. Avoid all contact with the skin. If contact occurs, wash affected area thoroughly with soap and water. Repeated skin contact may cause dermatitis in susceptible individuals. Wear protective clothing and gloves. Severe irritation will result if this product is splashed into the eyes. Always wear eye protection. If eye contact occurs, flood eyes with clear water for 15 minutes and immediately seek medical attention. Always maintain good industrial hygiene when using this product.

Notice To Buyer: All information contained herein is believed to be accurate. However, it is the responsibility of the end user to determine the suitability of this product in his particular application. As the use of this product by others is beyond our control, no warranty, whether expressed or implied, is made by Anchor Seal, Inc. or any of its representatives as to this product's merchantability or fitness for a particular purpose. Under no circumstances shall Anchor Seal, Inc. be liable for incidental, consequential or other damages for any reason. The sole liability of Anchor Seal, Inc. shall be to refund the purchase price or replace materials deemed to be defective by us.