Technical Data Sheet

Sylgard™ 184

#24236-10

Product Features

- Two-part, 10:1 mixing ratio
- Optically clear elastomer
- Silicone elastomer
- Medium viscosity
- Rapid heat cure or room temperature cure
- Addition cure system: no cure by-products
- Stable and flexible from 50°C (58°F) to +200°C (392°F)
- Excellent dielectric properties
- Flexible rubber – protects against mechanical shock and thermal cycling stress at components

Applications

Sylgard™ 184 can be used for many applications, a few of which are: encapsulation of amplifiers, coils, connectors, coils, equipment modules, circuit boards, transformers, solar cells, and ferrite cores.

Great when optical transparency is needed. Once cured, it protects against moisture, environmental attack, thermal and mechanical shock as well as vibration.

How to Use

Substrate Preparation

- Clean and degrease all surfaces with a suitable solvent prior to potting.
- **Note**: Make sure that all solvent is removed.

Mixing

- Sylgard 184 is packaged in lot matched kits with the base and curing agent in separate containers. Mix the two components thoroughly using a weight or volume ratio of 10:1. **Note**: The pot life is 2 hours for catalyzed Sylgard 184 at room temperature.
- It is recommended to vacuum de-air, with a residual pressure of 10-20 mm mercury, which, when applied for applied for 30 minutes, will sufficiently de-air the material.

How to Apply

- Apply the encapsulant without entrapping any air. **Note**: Vacuum encapsulation is recommended for complex geometries.
- For information on appropriate dispensing equipment for your application, please contact Customer Service at 1-800-523-5874.

Curing

- Cure using one of the following recommended schedules
    - 15 minutes at 150°C
    - 1 hour at 100°C
    - 4 hours at 65°C

- 24 hours at 23°C

Note: Large components and assemblies may require longer curing times.
Note: At 23°C the material will have cured sufficiently in 24 hours to be handled; however it takes 7 days for full mechanical and electrical properties to be attained.

Compatibility

- In some cases, Sylgard 184 may not cure to optimum properties when in contact with certain plastics or rubbers. **Note**: Baking the substrate slightly above the cure temperature or cleaning it with solvent will normally eliminate the problem.
- Certain chemicals, curing agents and plasticizers can inhibit a complete cure, including sulfur, polysulfides, polysulfones and other sulfur containing materials; organo-tin compounds; silicone rubber containing organo-tin catalysts; and amines, urethanes, amides and azides.

***Note**: This product is neither tested nor represented as suitable for medical or pharmaceutical uses.*