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OptiCLEAR™ Liquid Encapsulant SF5021

DESCRIPTION

Polysciences, Inc. OptiCLEAR™ Liquid Encapsulant is a new generation of low modulus fill material specifically designed to offer efficient light transmission and low cure stress. Polysciences' OptiCLEAR™ encapsulant is a novel 100% solids, one component, unfilled, liquid encapsulant designed for encapsulation of semiconductor devices requiring high toughness and strong adhesion to various substrates such as metal, ceramic and organic. The product can be cured by heat or UV light.

PRODUCT FEATURES

- Rapid cure by UV light exposure
- Highly efficient transmission of incident light and very little change after exposure to high heat
- Enhanced stress management through the ability to achieve low modulus
- Efficient material utilization resulting from extended pot life at room temperature
- Contamination free processing due to very low cure volatiles
- High Near-IR transmittance

UNCURED (WET) PROPERTIES

Color Clear
Viscosity @ 25°C 7,000 cps
Specific Gravity 1.07

PROCESS PARAMETERS

Cure Cycle

By heat 2 hours @ 120°C
By UV exposure UV-A light @ 3-5 J/cm²

CURED PROPERTIES

Tg 0°C
CTE 200 ppm/°C

Moisture Absorption after 96 hrs 85°C/85% RH
0.9%

Thermal Stability (% weight loss)
0.8% @ 300°C

Extractable Ionic Content

Na < 20 ppm
K < 20 ppm
Cl < 20 ppm

STORAGE AND HANDLING

Storage 12 months at <5°C
Safety Normal safety precautions for epoxy resins should be observed. Refer to MSDS for details.

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