

# Polytid ARC-11B Acrylic Conformal Coating

## CHEMISTRY

Single-part solvent-based acrylic resin coating with integrated UV tracer (365 nm) for easy quality inspection.

## PRODUCT DESCRIPTION

Polytid ARC-11B is a high-performance acrylic conformal coating formulated to protect printed circuit boards (PCBA) from moisture, dust, chemicals, and electrical shorts. It is specifically optimized with a customized viscosity profile for **manual brushing and dip-coating applications**, ensuring excellent flow and leveling characteristics without excessive runs or sagging.

## PROPERTIES & BENEFITS

- Industry-Grade Formulation:** Developed in alignment with high-reliability electronics requirements.
- Exceptional Dielectric Strength:** Prevents arcing and voltage breakdowns in high-density assemblies.
- Brush-Optimized Flow:** Superior leveling properties specifically tailored for manual application.
- Easy Reworkability:** Can be easily dissolved and removed locally with acetone or standard thinners for component repair.

## CHEMICAL AND PHYSICAL PROPERTIES

|                               |                                                     |
|-------------------------------|-----------------------------------------------------|
| Appearance                    | Clear, transparent liquid                           |
| Resin Base                    | Pure Acrylic                                        |
| Viscosity (Brookfield @ 25°C) | 230 - 270 cps                                       |
| Solid Content (% by weight)   | 35% - 40%                                           |
| Flash Point                   | 12 °C (Closed Cup)                                  |
| Density (@ 21°C)              | 0.93 - 0.95 g/cm <sup>3</sup>                       |
| Recommended Coating Thickness | 50 - 100 microns                                    |
| UV Indicator                  | Yes (Strong blue/purple glow under 365 nm UV light) |

## PACKAGING OPTIONS

- 1 L Can
- 5 L Container
- 20 L Drum

## STORAGE & STABILITY

The product must be stored in its original sealed container at temperatures between 15°C and 25°C in a well-ventilated, dry area. Keep away from direct sunlight, open flames, and heat sources.

**Shelf life:** 24 months (2 years) from the date of manufacture under proper storage conditions.

## HAZARDOUS GOODS

- Flammable Liquid (Class 3)**
- Information regarding protective measures for handling, storage, toxicity, and safety is available in our Material Safety Data Sheet (MSDS).

## CURING SCHEDULE

(Values at 25°C and 50% Relative Humidity)

|                |                                                                            |
|----------------|----------------------------------------------------------------------------|
| Tack-Free Time | 15 - 20 minutes                                                            |
| Full Cure      | 24 hours at room temperature<br>(Can be accelerated to 30 minutes at 65°C) |

## APPLICATION GUIDELINES

- Cleaning:** Ensure the PCB surface is completely free of flux residues, oil, and moisture. Clean with Isopropyl Alcohol (IPA) and dry thoroughly before application.
- Masking:** Cover connectors, switches, and test points with Kapton tape or liquid peelable mask.
- Application:** Apply uniformly using a high-quality, lint-free brush. Ensure an even coat and avoid excessive brushing to prevent air bubble entrapment.