Applied Technologies, Inc.
601 Jeffers Circle
Exton, PA 19341-2525
(610) 363-9640 Fax: (610) 363-8995

ENGINEERING DATA SHEET
URETHANE CONFORMAL COATING 3245

3245 is a highly flexible Urethane coating used for electronic circuit and component protection. The coating exhibits outstanding toughness and abrasion-resistance, along with protection from humidity and organic solvents. This material may be applied by brushing, banding, dipping, or through automatic dispensing equipment. When properly cured, this product yields a chemically inert film which helps to prevent the effects of corrosion, moisture, oxidation, abrasion, and thermal shock. No ingredients that are corrosive or harmful to electronic components are used in this material. It meets the requirements for MIL-I-46058C Type UR and has a fluorescent system for detection under UV light. 3245 contains no free isocyanates.

COMPOSITION PROPERTIES:

Color	Transparent Clear
Viscosity	175-225 cps (Brookfield LVT, Spin #2, 12 rpm, 25°C)
Tack Free Time	15 minutes @ 25°C
Cure Schedule	24 hours @ 80°C or 28 days @ 25°C
Service Temperature	-65 to 125°C
Dielectric Breakdown	>1,500 volts/mil
Insulation Resistance	$>1 \times 10^{14}$
Flexibility	Excellent (No cracking in bend over 1/8" mandrel)
Thinner*	MEK or Toluene
Shelf Life	One year @ 25°C (Sealed Container)

* 3245 is optimized for brushing/banding applications and thinning is not normally necessary. However, MEK may be added, with thorough blending, to replace solvent loss or to make slight adjustments for ease of application. In handling and using organic solvents, the safety precautions recommended in the MSDS should be observed.

PROCESSING PARAMETERS:

Surface Preparations	Be sure that all surfaces to be coated with 3245 are clean, dry, and free of any grease or oil.
Mixing	The material should be thoroughly stirred or shaken prior to use.
Application	Material is typically applied by brushing, banding, or dipping. Wet films should be allowed to air dry for one hour prior to handling or recoating.
Curing	Excellent results have been obtained by convection curing for 24 hours @ 80°C. Optimum cure cycles using radiant or convection conveyer ovens are best determined experimentally. Satisfactory results have also been found in some applications with a 28 day air dry cure @ 25°C.
Cleanup	Use Acetone, MEK, or Aromatic Hydrocarbon solvents.