

Conformal Coating, PC101 Protective

Single Component, fast drying, easily repairable coating for printed circuit boards and electrical equipment. PC101 is a clear compound of specially polymerized resins which totally protects circuit boards and electronic components from the atmosphere, it dries tack-free at room temperature within ten minutes of application and cures to a tough, flexible covering.



Available in four convenient container sizes; 16 oz. (473 ml) aerosol cans, 1 and 5 gallon (3.8 liter and 18.9 liter) cans and 50 gallon (189.3 liter) drums, with a wide range of uses which eliminates the space-wasting need to store a large array of protective coatings on your shelves.

PC101 has widespread acceptance in the electronics industry and is used by many major production companies and corporations and was developed to meet mil spec MIL-I-46058C.

FEATURES

Applications

- Has high resistance to chemical vapors, is totally waterproof and is unaffected by both salt and fresh water.

Protects printed circuit boards
- Provides permanent protection against corrosion, mildew and electrolysis on all non-ferrous metals used in the electronics industry.

Thick film circuits
- Durable enough to withstand continuous operating temperatures between -60°F (-51°C) and 280°F (138°C).

Electrical components
- Can be applied by brush, spray, dip or curtain coating.

Transformer coils
- Solderability of parts is maintained with the use of PC101.

Motor starters and field coils
- Resistant to discoloration, even at high temperatures.
- Can be thinned for spraying.

SPECIFICATIONS			
PHYSICAL PROPERTIES		ELECTRICAL PROPERTIES	
Specific gravity @75°F (24°C):	0.944 ±.002	Minimum insulation resistance:	1.5 x 10 ¹² ohms
Weight per gallon:	7.75 lb (3.52 kg)	Dielectric leakage rate:	<10 microamps at test voltage of 1500 RMS @ 60Hz
Percent solids:	Liquid: 36% Spray: 18%	Q (resonance) & dissipation factor:	66 at 50 mHz - uncoated board
Viscosity @75°F (24°C):	49 seconds w/ #2 Zahn cup ± 5 seconds	Q change before and after coating:	3.37% at 50 mHz

Centipoise @ 75°F (24°C):	205 w/ #3 cup @ 12 rpm	Moisture resistance:	Average insulation resistance is a minimum of 1×10^{10} ohms
Average thickness buildup:	.002" (.05mm)		
Color:	Clear		
Clarity:	Transparent with a fluorescent tracer added		
Average coverage/gallon:	450 sq. ft. (41.8m ²)		
Shelf life at 75°F (24°C):	1 year in air tight container		
Flammability when dry:	Self-extinguishing. Passes military specifications.		
Fungus resistant:	Passes mil. spec. MIL-I-46058C		
Main component:	Modified acrylic		
Flash point (Cleveland open cup):	44°F (7°C)		
Toxicity:	75 ppm		
Flexibility:	Passes mil. spec. MIL-I-46058C		
Hydrolytic stability:	Passes mil. spec. MIL-I-46058C		
Drying time for handling:	10 minutes @ 72°F (22°C), 50%RH		
Recommended curing conditions:	24 hr. @ room temp. @ 50% RH or 30 minutes @ 170°F (77°C)		
Curing Mechanism:	Solvent evaporation		
Solderability:	Excellent		
Heat resistance:	No change when heated to 400°F (204°C) and allowed to return to room temperature. No ill effects. Color unchanged.		
Adhesion:	Excellent. Meets federal standard 14/A method 6303		
Thermal shock test:	Passes mil. spec. MIL-I-46058C		
Continuous use temperature range:	-60 to 280°F (-51 to 138°C)		
Thinner:	PC101 thinner		

As defined in Subsection 611(b) of the Clean Air Act Amendments of 1990, PC101 contains **no** Class I or Class II ozone depleting substances.

START International has no control over the use of this product and cannot guarantee that the same results will be obtained as those described herein. Each user of this product should make their own tests to determine this product's suitability for their own particular use.