

## Titan Series – ANG T0

ANG T0 is a gel-state coating capable of imparting hydrophobicity to a wide variety of surfaces in a simple, one-step manufacturing process. ANG T0 is designed to protect a wide range of electronics from environmental conditions including water, salt & humidity while offering stability over a wide operating temperature range. The coating is formulated for no transfer under normal handling conditions, which makes it amenable to handling after application. The coating allows for electrical conductivity at the connection points after application. ANG T0 does not require masking or “keep out” areas in most applications, unlike standard conformal coatings. The coating is formulated with non-halogen containing materials.

Ingredients	CAS No	Concentration
C7 – C8 Isoalkanes	70024-92-9	69-71 %
Proprietary blend	Proprietary	29-31 %

Properties of Formulation	
Appearance	White/translucent
High shear viscosity (at 5000 s <sup>-1</sup> )	4-6 cP @ 25 °C
Boiling point of solvent	93-104 °C (200-220 °F)
Flash point of solvent	-11 °C (12 °F)
Environmental	Flammable, non-ozone depleting
Shelf life	6 months after opening 2 years (unopened container)
Specific gravity	0.78-0.79 @ 25 °C

Properties of Applied Coating	
Typical coating thickness	5-100 µm depending on application method
Water contact angle (glass substrate)	103 °
Operating temperature	-40 to +200 °C
Dielectric strength (ASTM D149)	1.0-1.3 kV/mil

### Application Techniques:

Surface Preparation: Typically, surfaces do not need special pre-cleaning prior to application.

Application Preparation: Coating needs to be agitated prior to application. Shake vessel with hand or using an overhead mixer until coating solution is re-dispersed and homogeneous.

Application Options: Spray/dispense by hand or with coating machine.

Curing: Air dry at room temperature until solvent has evaporated (as low as 10 seconds when sprayed).

### Inspection Techniques:

- Inspect the PCB under UV light. Coated areas will fluoresce.
- Visual, the coated board will have a matte appearance.

### Chemical Compatibility:

- Coating imparts hydrophobic properties to substrates.
- Coating may be susceptible to damage when exposed to certain surfactants and can be depleted by exposure to non-polar organic solvents like toluene, methylcyclohexane and MEK etc.

**Safety, Handling, Storage, Shelf Life:**

Coating needs to be agitated prior to application. Agitate coating by shaking vessel with hand or using an overhead mixer until coating solution is re-dispersed and homogenous. Optimal shelf life of 2 years when stored properly at 20 °C to 25 °C (68 °F to 77 °F) in a cool dry location away from heat sources or sun exposure. Humidity and high temperatures may decrease shelf life. Use an approved hazardous waste facility for disposal. Refer to the product Safety Data Sheet (SDS) for recommended work practices and other product safety information. Follow all applicable precautions and directions.

**For Additional Information:**

To request additional technical product data or sales assistance, contact actnano, Inc. Technical Team at (877) 655-8220. For more information on other actnano, Inc. products, please visit our website at [www.actnano.com](http://www.actnano.com).

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