

## **Conformal Coatings**

Conformal coatings protect substrates and component surfaces from destructive agents like moisture, dust, chemicals, and temperature extremes, that can compromise the lifespan and integrity of the electronic component. The conformal coatings we carry provide reliable protection in critical applications throughput the aerospace and defense, automotive, consumer electronics, and medical industries.

These materials can be purchased for your in-house manufacturing process or can be used with our conformal coating contract manufacturing services. We use a three or four axis robotic spray system for application. Using a robotic dispensing system allows us to deliver the highest quality coating service by ensuring repeatable coating thickness and precise coverage.

# ECT offers these conformal coating types:

- Parylene
- Acrylic
- Polyurethane
- Silicone
- Epoxy
- Fluoropolymer

### Working with ECT

Electronic Coating Technologies (ECT) has been helping manufacturers protect their electronics against extreme environments for over 25 years. We are experts in protective materials and application services. Our turnkey systems make working with ECT an unmatched experience. We partner with customers through every step of their application and design. For customers looking to take production in house, we also offer a broad portfolio of materials and state-of-the-art equipment from leading brands. When you work with ECT, you can expect unmatched expertise, customized solutions, and service for a total solution.





## **Our Most Commonly Used Conformal Coatings**

Below are our ten most commonly used conformal coatings. These materials vary in coating type, each having their own strengths and weaknesses. Our technical team has over 25 years experience with conformal coatings and is available to help you select the best material for your specific application.

Product	Coating Type	Description	Approvals
Humiseal 1A33	Polyurethane	Single component; no free isocyanates; fluoresces under UV light for easy inspection; chemically resistant; excellent moisture and environmental protection	MIL-I-46058C IPC-CC-830B RoHS Directive 2011/65/EC UL File Number E10569
Humiseal 1A20	Polyurethane	Single component; chemically resistent; fast curing; fluoresces under UV light for easy inspection; excellent moisture and environmental protection	MIL-I-46058C IPC-CC830 RoHS Directive 2002/95/EC UL File Number E105698
Humiseal 1B31S	Acrylic	Single component; fast drying; outstanding flexibility; easily repaired; fluoresces under UV light for easy inspection	MIL-I-46058C IPC-CC-830 RoHS Directive 2002/95/EC
Humiseal 1B73	Acrylic	Single component; fast drying; fluoresces under UV light for easy inspection; excellent moisture and environmental protection; also produced as pre-blended products, at a range of viscosities, suitable for a variety of application methods without further dilution	MIL-I-46058C IPC-CC-830 IEC61086 and IEC60664-3 ASTM G21 RoHS Directive EU 2015/863
Humiseal UV40	Acrylated Polyurethane	Single component; high solids; excellent chemical and moisture resistance; dual cure (light & moisture) for shadow areas; LED cure capability; fluoresces under UV light for easy inspection	IPC-CC-830 MIL-I-46058C IPC-J-STD-004 RoHS Directive 2015/863/EU China Standard GB30981-2020
Dymax 984-LVUF	Acrylated Urethane	Single component; no solvents added; halogen free; dual cure (light & heat) for shadow areas; blue fluorescing; low viscosity; enhanced thermal shock performance	MIL-I-46058C IPC-CC-830-B UL 746C UL 94V-0 Flammability RoHS Directives 2015/863/EU
Dymax 9483	Acrylated Urethane	Single component; no solvents added; halogen free; dual cure (light & moisture) for shadow areas; excellent thermal shock and corrosion resistance; great temperature/humidity performance; blue fluorescing; recommended for automotive applications	MIL-I-46058C IPC-CC-830-B Hyundai MS941-04 UL 94V-0 Flammability UL 746E RoHS Directives 2015/863/EU
Dymax 9-20557-LV	Arcylated Urethane	Single component; no solvents added; dual cure (light & heat) for shadow areas; lower viscosity for thin coatings; low modulus for enhanced thermal cycling performance	MIL-I-46058C IPC-CC-830-B RoHS Directives 2015/863/EU
Dymax 987	Acrylated Urethane	Single component; no solvents added; low viscosity; blue fluorescing; excellent chemical resistance	MIL-I-46058C IPC-CC-830-B RoHS Directives 2015/863/EU
Dymax 9978-E	Acrylated Urethane	Single component; no solvents added; halogen free; dual cure (light & moisture) for shadow areas; blue fluorescing; low viscosity; excellent chemical resistance	MIL-I-46058C IPC-CC-830-B UL 94 V0 Flammabiity UL 746-E RoHS Directives 2015/863/EU

#### ISO 9001:2015 & ISO 13485:2016 registered | ITAR & Controlled Goods Certified

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