

Conap[®] and Conathane[®] products are now

available from

ELANTAS Electrical Insulation

Electronic & Electrical Applications

Formulated Resins

Electronic and Electrical Applications

Application Legend

PM = Power ManagementED = Electrical DevicesHT = High Temperature Insulation InsulationCU = Controller UnitsEI = Electrical InsulationME = MicroelectronicsPCB = Printed Circuit Boards

Potting and Encapsulation Compounds

ELANTAS PDG, Inc's potting and encapsulation compounds are designed to optimize the performance and life of modern electronics by minimizing stress on components during thermal cycling and maintaining adhesion to a variety of substrates. The extensive range of mixed viscosity, shore hardness and thermal conductivity offered in this unique product suite afford you to select the optimal product to support fast and efficient production.

| Product | Application | Chemistry | UL Flame Rating | UL RTI Rating Elec/Mech | Initial Mixed Viscosity @ 25°C, cps | Shore Hardness |
|-------------------------------|---------------------------|--------------|--------------------|----------------------------|---|-------------------|
| CONATHANE EN-7 | PM, CU, ME, ED, EI, HT | Polyurethane | | | 5500 | 90A |
| CONATHANE EN-14 | PM, CU, ME, ED, EI, HT | Polyurethane | 94 V-2 | 120°C/120°C | 1500 | 65A |
| CONATHANE EN-16 | PM, CU, ME, ED, EI, HT | Polyurethane | | | 4000 | 80A |
| CONATHANE EN-21 | PM, CU, ME, ED, EI, HT | Polyurethane | 94 HB | 120°C/120°C | 2000 | 80A |
| CONATHANE EN-2521 | PM, CU, ME, ED, EI, HT | Polyurethane | 94 HB | 120°C/120°C | 4000 | 65D |
| CONATHANE EN-2541 | PM, CU, ME, ED, EI, HT | Polyurethane | 94 V-0 | 120°C/120°C | 6000 | 70D |
| CONATHANE EN-2550 | PM, CU, ME, ED, EI, HT | Polyurethane | 94 V-0 | 50°C/120°C | 3000 | 65D |
| CONATHANE EN-2553 | PM, CU, ME, ED, EI, HT | Polyurethane | 94 V-0 | 50°C/120°C | 4500 | 95A |
| CONAP EN-5338 | PM, CU, ME, ED, EI, HT | Polyurethane | 94 V-0 | 50°C/50°C | 400 | 40A |
| CONAP EN-5850 | PM, CU, ME, ED, EI, HT | Polyurethane | 94 V-0 | 130°C/130°C | 7500 | 85A |
| CONAP EN-5851 | PM, CU, ME, ED, EI, HT | Polyurethane | 94 V-0 | 130°C/130°C | 8500 | 85A |
| CONAP EN-5852 | PM, CU, ME, ED, EI, HT | Polyurethane | 94 V-0 | 130°C/130°C | 8500 | 85A |
| CONAPOXY FR-1047 with EA-87** | PM, CU, ME, ED, EI, HT | Ероху | 94 V-0/5VA | 90°C/90°C | 6,800 | 85D |
| CONAPOXY FR-1080 | PM, CU, ME, ED, EI, HT | Ероху | | | 2500 | 90D |
| CONAPOXY FR-1810 Black | PM, CU, ME, ED, EI, HT | Ероху | 94 V-0 | 90°C/90°C | 8000 | 80-85D |
| CONAPOXY FR-1820 Black | PM, CU, ME, ED, EI, HT | Ероху | 94 V-0 | 90°C/90°C | 6900 | 80-85D |

**Other curative options are available

Apply our formulation science to optimize your future. ELANTAS PDG, Inc. will partner with you to understand your specific application requirements while providing you with our technical expertise to help you overcome the challenges in electrical insulation and adhesion. Please contact our expert sales and technical experts to find out how our advanced formulations will help your electronic/electrical devices perform to its fullest.

Conformal Coatings

ELANTAS PDG, Inc. offers an extensive portfolio of conformal coatings for electronic and electrical applications. We have the technical expertise to formulate custom materials and continually invest in product development with specific focus on improved safety, environmental compliance and faster processing. Our portfolio includes a wide variety of thin film dielectric barrier systems, designed for rigorous applications that are qualified across multiple IPC and MIL specifications to meet your specific performance and quality standards.

| Product | Application | Chemistry | MIL-Spec / IPC | Solids Content, % | Tack Free Time @ 25°C | Cure Time @ 25°C |
|----------------------|-----------------|--------------|--|----------------------|--------------------------|--|
| CONATHANE CE-1155 | CU, ME, ED, PCB | Polyurethane | MIL-I-46058-C, Type UR IPC-CC-830B | 60A / 65 | 5 - 6 hrs | 24hrs for handling / 7 days for full cure |
| CONATHANE CE-1155-35 | CU, ME, ED, PCB | Polyurethane | MIL-I-46058-C, Type UR IPC-CC-830B | 37A / 30B | 2 - 3 hrs | 24hrs for handling / 7 days for full cure |
| CONATHANE CE-1164 | CU, ME, ED, PCB | Polyurethane | MIL-I-46058-C, Type UR IPC-CC-830B | 50 | 20 - 30 min. | 24hrs for handling / 7 days for full cure |
| CONAP CE-1170 | CU, ME, ED, PCB | Acrylic | MIL-I-46058-C, Type AR IPC-CC-830B | 31 | 10 - 15 min. | 24 hours |
| CONAP CE-1171 | CU, ME, ED, PCB | Acrylic | MIL-I-46058-C, Type AR IPC-CC-830B | 30 | 20 min. | 24 hours |
| CONAP CE-2280 | CU, ME, ED, PCB | Polyurethane | Tested per MIL-I-46058-C, Type UR | 45 | 30-40 min. | 24 hours |
| CONAP CE-2290 | CU, ME, ED, PCB | Acrylic | MIL-I-46058-C, Type AR IPC-CC-830B | 28 | 5 min. | 24 hours |

Performance and Industrial Adhesives

ELANTAS PDG, Inc. extends its formulation expertise to deliver a range of polyurethane and epoxy adhesives and sealants to address the rigorous requirements in electronic applications. These products are designed to address the challenges presented by varying substrate material, automated assembly processes and an infinite combination of production environments and performance requirements.

| Product | Application | Substrate to be Bonded to | Mix Ratio wt. | Initial Mixed Viscosity 25°C, cps | Gel Time | Shear Strength psi |
|--------------------|-------------|---------------------------------------|---------------|---|----------------------------------|-----------------------|
| EASYPOXY K-20 | ME, ED, PCB | Metal, Rubber, Plastics | 100 / 45 | Paste | Pot Life 20 Mins | 2500 |
| EASYPOXY K-22 | ME, ED, PCB | Metal, Rubber, Plastics | 100 / 45 | Paste | Pot Life 20 Mins | 2500 |
| EASYPOXY K-45 | ME, ED, PCB | Metal, Plastics, Ceramics, Glass | 100 / 100 | Light Paste | Pot Life 4-6 Mins | 2520 |
| EASYPOXY K-230 | ME, ED, PCB | Metal, Glass, Plastics, Ceramics | 100 / 45 | Light Paste | Pot Life 60 Mins | 2450 |
| CONAP PR-1167 | ME, ED, PCB | Metal, Polyurethane, Rubber | One-component | 75 | Based on customer application | n/a |
| CONAPOXY AD-10 | ME, ED, PCB | Metal, Plastics, Ceramics | One-component | Thixotropic Non-Flow | Based on customer application | 3000 |
| CONAPOXY AD-1146 | ME, ED, PCB | Metal, Glass, Glass Fiber Laminate | One-component | 2000 | Based on customer application | >150* |
| CONAPOXY AD-1147 | ME, ED, PCB | Metal, Glass, Glass Fiber Laminate | One-component | 2000 | Based on customer application | >150* |
| CONAPOXY AD-1146-C | ME, ED, PCB | Metal, Glass, Glass Fiber Laminate | One-component | 160 | Based on customer application | >150* |
| CONAPOXY AD-1147-C | ME, ED, PCB | Metal, Glass, Glass Fiber Laminate | One-component | 160 | Based on customer application | >150* |

* Peel strength expressed in lbs./in.of width. Metal was primed with CONAPOXY AD-1146, neoprene was abraded and primed with CONAP PR-1167, and polyvinyl chloride was made tacky with MEK and primed with CONAP AD-1161.

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