

Global Footprint

Headquarters/ Production, Sales/ Sales office



ELANTAS, the Division within ALTANA Group, is Global leading company for insulating materials for the electrical and electronic industry. ELANTAS covers the markets through its business lines. The “Wire Enamels” business line offers solution for various insulation requirements of coated wire industry. The mechanical stabilization and secondary insulation of coated wire developments and the potting of electrical components are focus of the business line “Electrical”. For the embedding, encapsulating or coating of electronic components, products of the “Electronic” business line are used. ELANTAS also have “Engineering Material & New Business Development” business line for new applications.

ELANTAS Malaysia Sdn. Bhd. is a service center of excellence for our high quality products serving South East Asia, East Asia and Oceania. We committed to the production, development and marketing of the highest quality insulation for magnet wire, electrical and electronic components and engineering materials in the most efficient manner possible. ELANTAS Malaysia Sdn. Bhd is certified to ISO 9001: 2015.

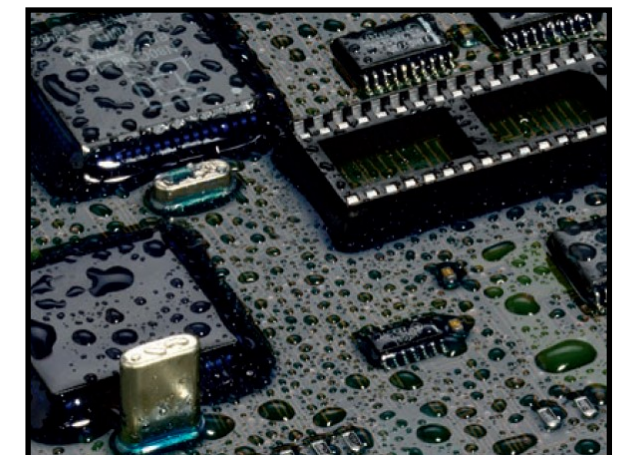
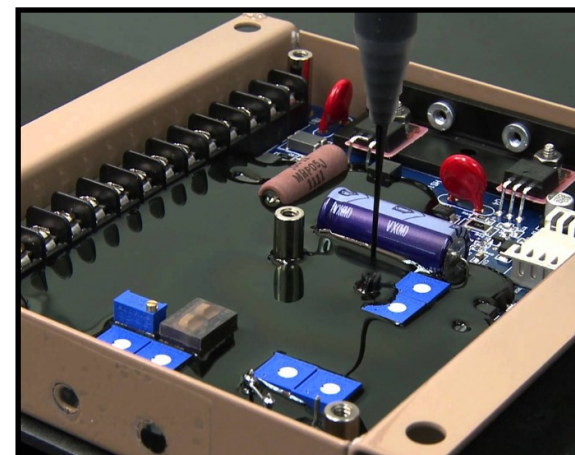
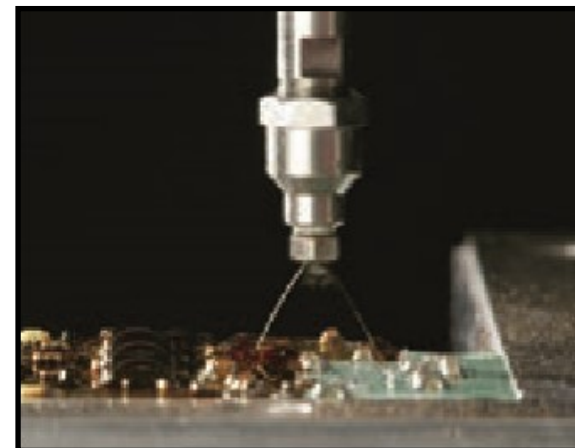
ELANTAS Malaysia Sdn. Bhd. (1011068-A)

Lot 550, Jalan Keretapi Lama,
Batu 7 1/2, Jalan Kapar/KU15,
42200 Kapar,
Selangor Darul Ehsan,
MALAYSIA

Tel: +6033291 8878
Fax: +6033291 3878

ELANTAS MALAYSIA

Product Selection Guide For Electronic Application



Conformal Coating

AEROSPACE & DEFENSE

| Product | Chemistry | Description | Qualification | Insulation Resistance @25oC, 50%RH | Chemical resistance |
|-----------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------|---------------------|
| CONATHANE® CE-1155 | Polyurethane | <ul style="list-style-type: none"> Two component system Resistance to chemical environments Imparts low stress on fragile components Excellent electrical properties | MIL-I-46058C, Type UR IPC-CC-830B UL94 V-0 | $>2.5 \times 10^{13}$ | Excellent |
| CONATHANE® CE-1155-35 | Polyurethane | <ul style="list-style-type: none"> Two component system Resistance to chemical environments Imparts low stress on fragile components Pre-diluted spray version of CE-1155 | MIL-I-46058C, Type UR IPC-CC-830B | $>2.5 \times 10^{13}$ | Excellent |
| CONATHANE® CE-1164 | POLYURETHANE | <ul style="list-style-type: none"> One component system Resistance to chemical environments Impart low stress on fragile components Easy to handle | MIL-I-46058C, Type UR IPC-CC-830B H Free IEC61249-2-21 | 2.5×10^{13} | Excellent |

AUTOMOTIVE- HUD, LIDAR, Car Navigation, ECU, Airbag Module, ABS Module & etc.

| Product | Chemistry | Description | Qualification | Volume Resistivity @23°C | Chemical resistance | Dielectric Strength@ 23°C (KV/mm) |
|---------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-----------------------------|---------------------|--------------------------------------|
| BECTRON® PL4122 | Urethane Modified Alkyd | <ul style="list-style-type: none"> One component system Fairly easy to use and repair (AC93 or AC 217) Excellent electrical & moisture resistance | ROHS Compliant IPC-CC-830B UL94 V-0 BMW GS 95011-5 listed | 1×10^{15} | Excellent | 112 |
| BECTRON® PT 4600 | Polyurethane | <ul style="list-style-type: none"> One component cured by UV/ or by moisture Solvent free Rapid UV curing Excellent electrical & moisture resistance | ROHS compliant | 1×10^{11} | Excellent | 20 |
| BECTRON® PT 4606 | Polyurethane | <ul style="list-style-type: none"> One component cured by UV/or by moisture Thixotropic properties allow accurate application to selected areas Rapid UV curing Solvent free Excellent electrical & moisture resistance | ROHS Compliant | 1×10^{11} | Excellent | 20 |
| BECTRON® SC 76V1-36 | Silicone | <ul style="list-style-type: none"> One component system Fast cure at room temperature Temperature resistance from -55°C up to 200°C Superior electrical & moisture resistance | UL94 HB ROHS compliant | 2×10^{15} | Good | >18 |

CONSUMER ELECTRONICS- PC, Laptop, Game Gadget, VR Goggles & etc.

| Product | Chemistry | Description | Qualification | Tack Free | Cure time | Repairability |
|---------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------|-----------------|---------------|
| CONAP® CE-1171 | Acrylic | <ul style="list-style-type: none"> One component system Easy to use and repair Low VOC alternative to CE-1170 Excellent electrical and moisture resistance | MIL-I-46058C, Type AR IPC-CC-830B UL94 V-0 H Free IEC61249-2-21 | 20-30 minutes @ 25°C | 24 hours @ 25°C | Excellent |
| BECTRON® PL 4122 | Urethane Modified Alkyd | <ul style="list-style-type: none"> One component system Fairly easy to use and repair (AC93 or AC 217) Excellent electrical & moisture resistance | ROHS Compliant IPC-CC-830B UL94 V-0 BMW GS 95011-5 listed | 15 minutes @ 23°C | 16 hours @ 23°C | Fair |
| BECTRON® SC 76V1-36 | Silicone | <ul style="list-style-type: none"> One component system Fast cure at room temperature Temperature resistance from -55°C up to 200°C Superior electrical & moisture resistance | UL94 HB ROHS compliant | 10 minutes @ 23°C | 24 hours @ 23°C | Good |

This information is presented in good faith to assist the customer in determining whether our products are suitable for his application. No Warranty or representation, however, is intended or made, nor is protection from any law or patent to be inferred and all patent rights are reserved.

Conformal Coating

HOME APPLIANCES- Air Conditioner, Washing Machine, Refrigerator & etc.

| Product | Chemistry | Description | Qualification | Tack Free | Cure time | Repairability |
|---------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------|------------------------------------|---------------|
| 009-0051 | Acrylic | <ul style="list-style-type: none"> One component system Easy to use and repair Excellent moisture resistance | BS 5917 compliant MIL-I46058VC | 15 minutes @ 23°C | 24 hours @ 23°C 10 hours @ 80°C | Excellent |
| BECTRON® PK 5542 | Polyurethane | <ul style="list-style-type: none"> One component system Soft duroplastic when cured which suitable for chemical, shock and vibration protection Excellent electrical & moisture resistance | ROHS Compliant IPC-CC-830B UL94 V-0 | - | 30 minutes @ 90°C | Fair |
| BECTRON® SC 76V1-36 | Silicone | <ul style="list-style-type: none"> One component system Fast cure at room temperature Temperature resistance from -55°C up to 200°C Superior electrical & moisture resistance | UL94 HB ROHS compliant | 10 minutes @ 23°C | 24 hours @ 23°C | Good |

INDUSTRIAL ELECTRONICS- Control Unit, Robot, Automation System & etc.

| Product | Chemistry | Description | Qualification | Tack Free | Cure time | Chemical Resistance |
|---------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-------------------|---------------------------------------------|---------------------|
| BECTRON® PL4122 | Urethane Modified Alkyd | <ul style="list-style-type: none"> One component system Fairly easy to use and repair (AC93 or AC217) Excellent electrical and moisture resistance | ROHS Compliant IPC-CC-830B UL94 V-0 BMW GS 95011-5 listed | 15 minutes @ 23°C | 15 hours @ 23°C | Good |
| BECTRON® PT 4606 | Polyurethane | <ul style="list-style-type: none"> One component cured by UV/or by moisture Thixotropic properties allow accurate application to selected areas Rapid UV curing Solvent free Excellent electrical & moisture resistance | ROHS compliant | - | UV: 5-30s moisture shadow cure: 2-3 days | Excellent |
| BECTRON® SC 76V1-36 | Silicone | <ul style="list-style-type: none"> One component system Fast cure at room temperature Temperature resistance from -55°C up to 200°C Superior electrical & moisture resistance | UL94 HB ROHS compliant | 10 minutes @ 23°C | 24 hours @ 23°C | Good |

MEDICAL- Operating Room Monitors, Surgical Instruments, Pacemaker & etc.

| Product | Chemistry | Description | Qualification | Tack Free | Cure time | Repairability |
|---------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------|-----------------|---------------|
| BECTRON® SC 76V1-20 | Silicone | <ul style="list-style-type: none"> One component system Rapid curing at Room Temperature Temperature resistance up to 200°C Outstanding thermo-shock resistance Excellent electrical & moisture resistance | UL 94 V-0 FDA certified (Achievable within 6-8 weeks) RoHS compliant | 12 minutes @ 25°C | 24 hours @ 25°C | Good |

This information is presented in good faith to assist the customer in determining whether our products are suitable for his application. No Warranty or representation, however, is intended or made, nor is protection from any law or patent to be inferred and all patent rights are reserved.

Conformal Coating Comparison Guide

| PROPERTIES | ALKYD | EPOXY | POLYURETHANE | ACRYLIC | SILICONE |
|-------------------------------------|-------|----------------|--------------|---------|----------|
| Protection against moisture | 1 | 1 | 1 | 2 | 2 |
| Protection against solvents | 1 | 1 | 1 | 4 | 2 |
| Protection against aggressive media | 1 | 1 | 1 | 4 | 2 |
| Mechanical Strength | 1 | 1 | 2 | 3 | 2 |
| Temperature resistance | 2 | 2 | 3 | 4 | 1 |
| Adhesion to unwashed PCB | 2 | 2 | 1 | 4 | 2 |
| Temperature cycle range (°C) | 2 | 2 | 2 | 3 | 1 |
| Volume resistivity | 1 | 1 | 1 | 1 | 1 |
| Environmentally friendly | Yes | Yes | Yes | No | No |
| UL 94V-0 | Yes | Yes (possible) | Yes | Yes | Yes |

Rating: 1= Excellent , 2= Good, 3= Fair, 4= Poor

Potting & Encapsulation Compounds

| Product | Application | Chemistry | UL Flame Rating | UL RTI Rating Elec/Mec | Thermal Range | Initial Mixed viscosity @ 25°C, cps | Firm Gel Time @ 25°C | Shore Hardness |
|--------------------------------------------|------------------------|-------------|-----------------|---------------------------|-----------------|----------------------------------------|----------------------|----------------|
| CONAPOXY® FR-1820 Black | PM,CU,ME,ED,EI,HT | 2K Epoxy | 94-V0 | 90°C/90°C | - | 6900 | 16-30 minutes | 80-85D |
| CONATHANE® EN-2553 | PM, CU, ME, ED, EI, HT | 2K PU | 94V-0 | 50°C/120°C | - | 4500 | 55 minutes | 95A |
| CONAP® EN-5852 | PM,CU,ME,ED,EI,HT | 2K PU | 94V-0 | 130°C/130°C | - | 8500 | 20-30 minutes | 85A |
| MICARES® X1087RD P978 | PM,CU,ME,ED,EI,HT | 2K PU | 94V-0 | 130°C/ - | - | 2300 | ~2 hours | 85-90A |
| BECTRON® PU-4522 | PM,CU,ME,ED,EI,HT | 2K PU | 94V-0 | - | -40°C to +125°C | 1800 | 15-20 minutes | 85A |
| BECTRON® PU-4526 | PM, CU, ME, ED, EI, HT | 2K PU | 94V-0 | - | -40°C to +130°C | 1900 | ~25 minutes | 55D |
| BECTRON® SG 75V1-60 BECTRON® SG 79V1-60 | PM, CU, ME, ED, EI, HT | 2K Silicone | 94-V1 | - | -40°C to +200°C | 350 | ~2 hours | Low hardness |
| BECTRON® SK 75V2-65 BECTRON® SH 79V2-65 | PM, CU, ME, ED, EI, HT | 2K silicone | 94V-0 | - | -40°C to +200°C | 3500 | ~1 hour | 65A |

PM= Power Management EI= Electrical Insulation HT= High Temperature Insulation CU= Controller units PCB= Printed Circuit Board ED= Electrical Devices ME= Microelectronics

This information is presented in good faith to assist the customer in determining whether our products are suitable for his application. No Warranty or representation, however, is intended or made, nor is protection from any law or patent to be inferred and all patent rights are reserved.