



## Material Solutions for Agricultural Controllers

Expertise/Closeness/Innovation



The agricultural controller market is at the heart of modern farming, bringing technological precision to an age-old industry. As we steer towards smarter, more automated agricultural practices, the demands on these controllers grow exponentially. They must withstand diverse environmental conditions – from dust storms to heavy rains – while ensuring uninterrupted performance. The stakes? Our global food supply and the efficiency of farms worldwide.

Rooted in a tradition of excellence, ELANTAS crafts state-of-the-art conformal coatings and potting solutions, specifically tailored for the agricultural controller market.

Our products stand as a protective shield, safeguarding delicate electronic components from moisture, contaminants, and the unpredictable whims of nature. We ensure that agricultural controllers remain robust, reliable, and ready to meet the challenges of every season.

Yet, our vision extends beyond just protection. Understanding the unique requirements of today's agricultural industry, our coatings and potting materials also promise enhanced durability and adaptability for specific end-use applications. Whether it's for advanced irrigation systems, autonomous tractors, or crop monitoring devices, ELANTAS delivers solutions that not only defend but also ruggedize agricultural controllers.

In a world where agriculture meets innovation, and where every harvest counts, ELANTAS is your dependable ally. We're here to fortify the technological backbone of farming, ensuring that as agriculture evolves, it does so with unmatched resilience and efficiency. Together, let's cultivate the future of agricultural controller solutions.

## Potting Material Properties\*\*

Product	Chemistry	Curing Mechanism	Mix Ratio (by weight / by volume)	Mixed Viscosity	Shore Hardness	Worklife	UL Flame Class
Conathane® EN-2523	Polyurethane	RT/HEAT	20:100 24:100	2,800 cP	D 50	50 min	HB @ 1.5mm
Conathane® EN-5310	Polyurethane	RT/HEAT	1:1	3,000 cP	A 20-55	50 min	V-2 @ 6.0mm
Conathane® EN-5317	Polyurethane	RT/HEAT	100:97 100:100	300 cP	A 70	15 min	-
CONAP® EN-5852	Polyurethane	RT/HEAT	20:100 25:100	8,500 cP	A 85	30 min	V-0 @ 2.8mm
ELAN-Tron® U 510S	Polyurethane	RT/HEAT	100:24 100:18.2	4,000 cP	A 55	25 min	-

\*\*Values provided are typical and can vary pending application and processing conditions

## Conformal Coating Material Properties\*\*

Product	Chemistry	Curing Mechanism	No. of Components	% Solids	Viscosity	Tack Free Time	UL Flame Class
Synthite® AC-46-1	Urethane-Alkyd	RT / Heat	1	45 %	200 cP	60 min	V-0 @ 1.6 – 2.4 mil
Bectron® PL 4122	Urethane-Alkyd	RT / Heat	1	40-45 %	40-75 cP	60 min	V-0 @ 0.6 – 2.0 mil
Bectron® PT 4600	Urethane-Acrylate	UV	1	100 %	1,000 cP	5 - 10 sec	V-0 @ 0.4 – 3.6 mil

\*\*Values provided are typical and can vary pending application and processing conditions

ELANTAS is a global supplier of materials for the electric and electronic industry, including:

### Conformal Coating

Bectron®, CONAP®, Conathane®  
Acrylic/Epoxy/Polyurethane/Polyurethane –  
Alkyd/Polyurethane – Acrylate/Silicone  
1K/2K/UV & Heat Cure/UV & Moisture Cure/Heat  
Cure/Moisture Cure/Air Dry

### Potting & Casting

Bectron®, CONAP®, Conapoxy®, Conashield™, Conathane®  
Epoxy/Polyolefin/Polybutadiene/Polyurethane/Silicone  
1K/2K/Heat Cure/Moisture Cure/RT Cure

### Encapsulation

Bectron®, Conashield™, Conathane®  
Polyolefin/Polyurethane/Polyurethane –  
Acrylate/Silicone  
1K/2K/UV & Moisture Cure/Heat Cure/Moisture Cure

ELANTAS is part of the ALTANA group and is a leading manufacturer of insulating and protecting materials for the electrical and electronics industry. Our portfolio includes wire enamels, impregnating resins and varnishes, flexible electrical insulation materials, casting & potting resins for motors, generators and transformers, as well as conformal coatings for protecting PCBs, modules, or sensors. In addition, we offer a wide range of adhesives, as well as materials for printed electronics.

### ELANTAS North America, Inc.

5200 North Second Street, St. Louis, MO 63147 USA  
Tel (314) 621-5700  
[info.elantas.northamerica@altana.com](mailto:info.elantas.northamerica@altana.com)

[www.elantas.com/pdg](http://www.elantas.com/pdg)

A member of  ALTANA

