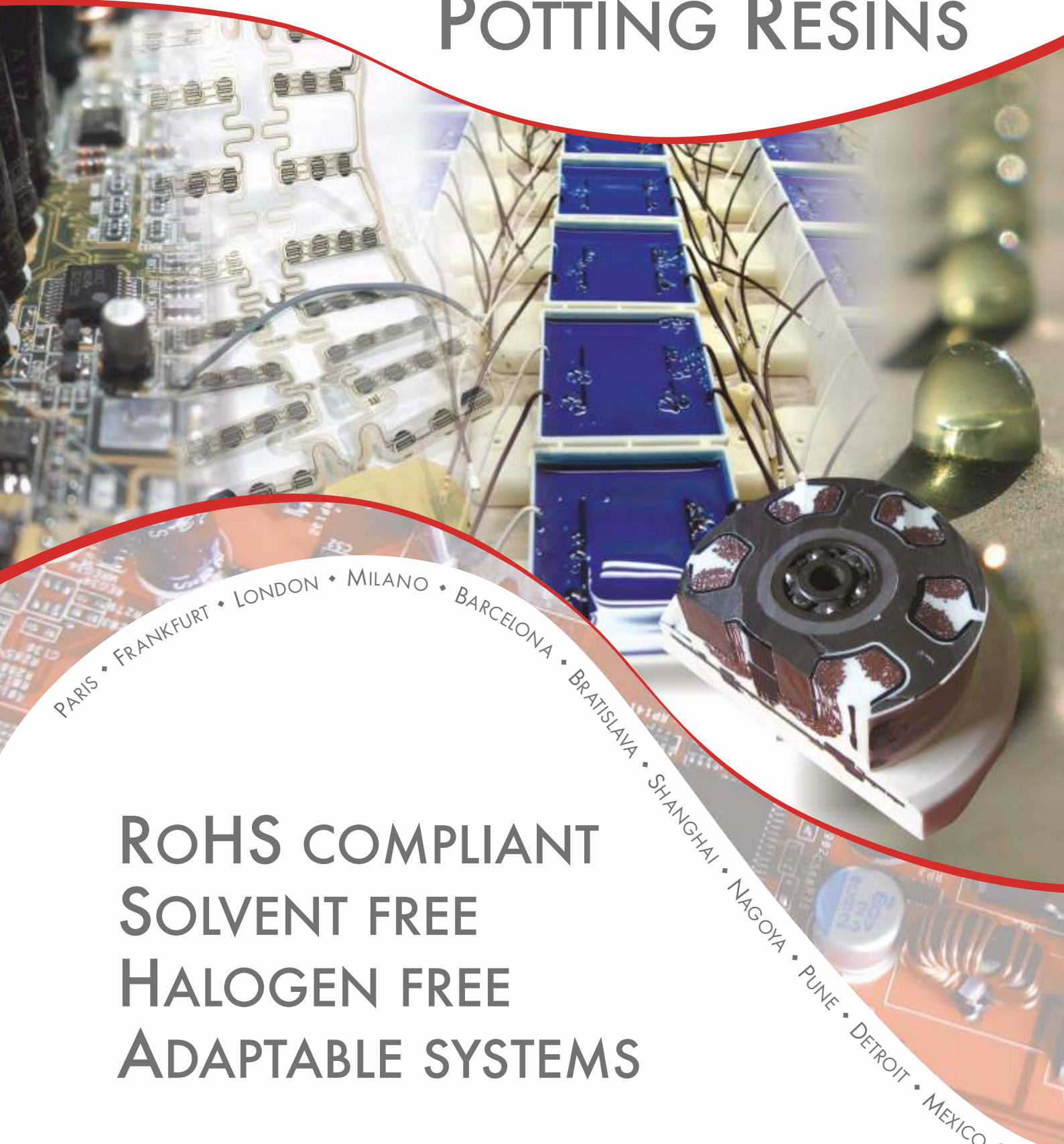


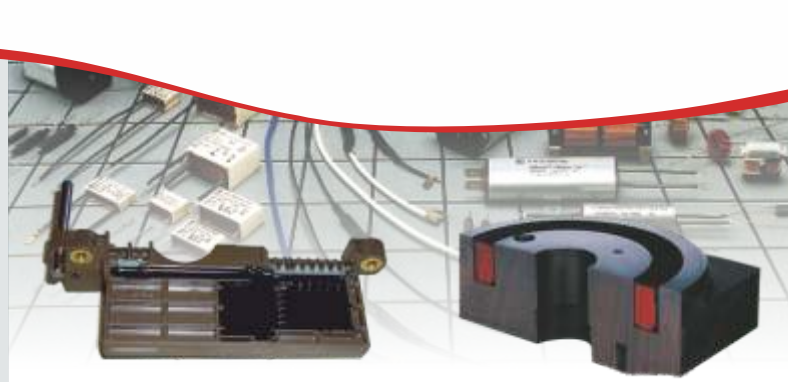
# ENCAPSULATION & POTTING RESINS



PARIS • FRANKFURT • LONDON • MILANO • BARCELONA • BRATISLAVA • SHANGHAI • NAGOYA • PUNE • DETROIT • MEXICO CITY

ROHS COMPLIANT  
SOLVENT FREE  
HALOGEN FREE  
ADAPTABLE SYSTEMS





## HIGH TECH RESINS FOR INNOVATIVE INDUSTRIES

*Our resin formulations satisfy the most demanding requirements of potting, encapsulation and casting applications in numerous industries, including electronic devices, automotive and aerospace: Resins for capacitors, relays, transformers, sensors, electronic boards, coils, electronic devices, filters.*

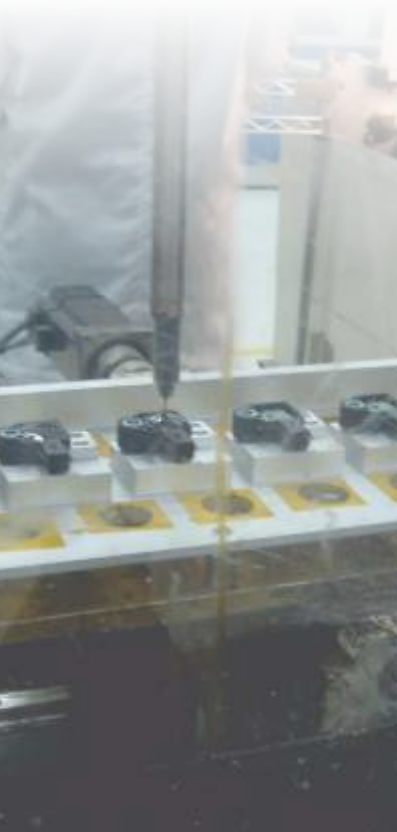
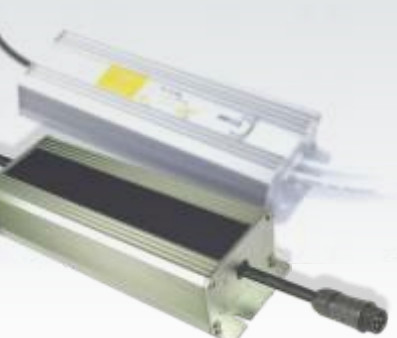
*Our resin systems can withstand the high temperatures associated with lead-free soldering processes. Their purity is combined with excellent mechanical and chemical stability, minimizing contamination and maximizing safety during the handling of sensitive electronic components.*

*Axson Technologies systems are designed to efficiently integrate into your industrial application process.*

### AVAILABLE SYSTEMS:

- \* Epoxy and polyurethane
- \* 100 % solvent-free
- \* Customized processability
- \* Superior wear resistance
- \* High purity
- \* Mechanical strength
- \* Flame retardant resins
- \* Dielectric properties
- \* Excellent dimensional stability
- \* Chemical & environmental resistance
- \* Excellent temperature performance
- \* Thermal shock resistance
- \* "Re-entrable/dig-outable" resins
- \* Thermal conductivity

All our resins can be adapted to your requirements. All products are composed of two parts and can be cured at room temperature.



## POLYURETHANE RESINS

### FLEXIBLE:

#### RE 11263/RE 1110

Very flexible polyurethane which avoids mechanical stress on sensitive components. High resistance to moisture and thermal shock. Very low dielectric constant.

#### RE 11501A/RE 1020

**UL 94: V0 certified. UL 746B: RTI 120 °C.** Low stress on embedded components. The exceptional combination of a soft PU makes this resin formulation ideal for avoiding mechanical stress on components.



#### RE 11600/RE 1020

Fast processing due to rapid-cure speed. Low viscosity. Fills intricate parts void-free. Low stress on embedded components. Allows flexible processing: injection moulding or machining. Excellent electrical properties over a wide range of environmental conditions.



#### RE 11700/RE 1060

Flexible with **high transparency and UV resistance**. Low viscosity and compliant with regulation. Dedicated for the inclusion of LEDs.



#### RE 11820/RE 1020

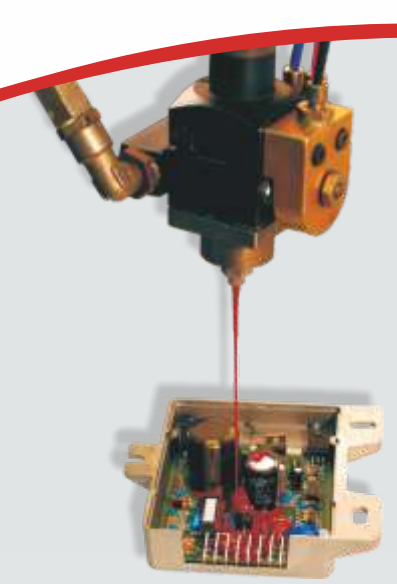
Excellent dielectrical properties. Fungus resistance. Excellent moisture resistance. A high quality, high-end product.



#### RE 11880/RE 1020

High temperature resistance. Low moisture absorption. Low viscosity. Excellent mechanical, thermal and chemical resistance properties.





## POLYURETHANE RESINS

### SEMI-RIGID:

#### RE 12461/RE 1010

**UL 94: V0 certified.** Low viscosity. Good electrical heat dissipation and thermal conductivity. Available in several colors. Good humidity resistance. Choice of three different pot lives (handling time).



#### RE 12500/RE 1030

General purpose resin. Good electrical heat dissipation and thermal conductivity. Economical system.

#### RE 12531/RE 1020

**UL 94: V0 certified.** 3 mm thickness, semi flexible, 2 benefits: low viscosity and heat resistance. **UL 746B: RTI 150 °C.** Appropriate for transformer industry.



#### RE 12551/RE 1020

**UL 94: V0 certified.** Good electrical heat dissipation and thermal conductivity. Excellent mechanical, thermal and chemical resistance properties (130 °C). Choice of two different pot lives.

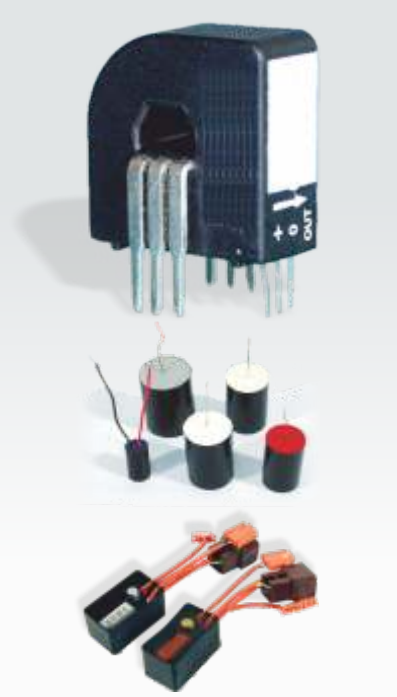


#### RE 12560/RE 1020

General purpose resin. Ease of processing. Low viscosity. Can be used in processing where manual application is required. Choice of three different pot lives.

#### RE 12602/RE 12602

Short time-cure speed and thixotropic resin. A convenient 1:1 mix ratio by volume. Fast setting. Ideal for moisture proofing. Adheres well to most plastics and metals.



## POLYURETHANE RESINS

### RIGID:

#### RE 12800/RE 1020

Multipurpose resin. Low viscosity. Good thermal mechanical shock resistance. Excellent for demanding industrial applications.

#### RE 12840/RE 1010

Low viscosity. Ease of processing. Good thermal conductivity. Electric heat dissipation and thermal conductivity. Offers the rigidity of an epoxy with the tenacity of a polyurethane.

#### RE 12851/RE 1030

Flame retardant properties. Electric heat dissipation and thermal conductivity. Fast curing.

#### RE 12885/RE 1030

Chemical resistance. Extreme temperature performance. Excellent dielectric properties. Low viscosity. Good thermal and mechanical shock resistance. Rapid cure at elevated temperatures. Excellent for demanding industrial applications.



## EPOXY RESINS

### FLEXIBLE:

#### RE 22801/RE 2120

Flame retardant properties. Low stress on embedded components. Low exotherm. Improved thermal shock. Slow cure rate. Excellent heat transfer capacity. May be used manually.

### SEMI-RIGID:

#### RE 22801/RE 2050

**UL 94: V0 certified.** Rapid cure rate. Low viscosity. Excellent handling properties. Formulated to absorb the stress of conflicting CTE's among components. Excellent dimensional stability. Slightly more rigid than RE 22801/RE 2120. Economical system.



### RIGID:

#### RE 22891/RE 2030

**UL 94: V0 certified.** Long cure rate. Chemical resistance. High temperature resistance. A rigid version of RE 22801.



# Selector Guide

| Product                            | Color       | Typical applications   | Shore hardness | Viscosity mPa·s at 25 °C | Pot life (min)* | Density (g/cm <sup>3</sup> ) | Mix ratio (weight) |
|------------------------------------|-------------|--|----------------|--------------------------|-----------------|------------------------------|--------------------|
| <b>POLYURETHANE RESINS</b>         |             |  |                |                          |                 |                              |                    |
| <b>RE 11263</b><br><b>RE 1110</b>  |             | Protection of very brittle electronic components. Sensors. Antennas.   | 26 A           | 1.700                    | 12              | 0,98                         | 100:19             |
| <b>RE 11451</b><br><b>RE 1010</b>  |             | Protection of electronic components requiring fire retardant and humidity resistance properties.                             | 45 A           | 2.100                    | 50              | 1,28                         | 100:10             |
| <b>RE 11501A</b><br><b>RE 1020</b> |             | Sensitive electronic components requiring UL 94 V0. Sensors, printed circuit boards. <b>UL</b> 746B: RTI approved 120°C.     | 55 A           | 2.400                    | 45              | 1,29                         | 100:10             |
| <b>RE 11600</b><br><b>RE 1020</b>  |             | Cable connectors and wiring harnesses. Electronic components for the automotive industry.                                    | 60 A           | 500                      | 4               | 1,14                         | 100:30             |
| <b>RE 11633</b><br><b>RE 1040</b>  |             | Underwater applications such as pumps. Applications for electronic components used in a wet environment or immersion.        | 63 A           | 2.500                    | 55              | 0,97                         | 100:26             |
| <b>RE 11700</b><br><b>RE 1060</b>  | transparent | Transparent and UV resistant material for LED and lighting encapsulation.  | 70 A           | 250                      | 30              | 1,13                         | 100:100            |
| <b>RE 11820</b><br><b>RE 1020</b>  |             | Radio transmitters. Applications for electronic components used in an environment where high moisture resistance is desired. | 82 A           | 4.500                    | 40              | 1,10                         | 100:25             |
| <b>RE 11880</b><br><b>RE 1020</b>  |             | Ideal for automotive applications requiring heat resistance. Sensors. Electronic devices.                                    | 88 A           | 1.500                    | 40              | 1,41                         | 100:20             |
| <b>RE 12461</b><br><b>RE 1010</b>  |             | General purposes. Ideal for intricate parts requiring UL 94 V0. Railways fire retardants approved. <b>UL</b>                 | 46 D           | 1.100                    | 10/30/50        | 1,55                         | 100:16             |
| <b>RE 12500</b><br><b>RE 1030</b>  |             | All industrial applications requiring a cost-effective product.  | 50 D           | 2.600                    | 30              | 1,66                         | 100:10             |
| <b>RE 12531</b><br><b>RE 1020</b>  |             | Low and medium voltage transformers. Converters. <b>UL</b> 746B: RTI approved 150°C.   | 53 D           | 1.650                    | 22              | 1,57                         | 100:14             |
| <b>RE 12551</b><br><b>RE 1020</b>  |             | Small transformers. Electronic cards. Relays. Electronic filters. Applications requiring a fire resistance. <b>UL</b>        | 55 D           | 2.400                    | 30/60           | 1,55                         | 100:14             |
| <b>RE 12560</b><br><b>RE 1020</b>  |             | Small transformers. Electronic cards. Relays. Electronic filters. Applications requiring reasonable resistance to humidity.  | 56 D           | 1.400                    | 25/30/50        | 1,33                         | 100:25             |
| <b>RE 12602</b><br><b>RE 12602</b> |             | Sensitive potting applications where leakages must be avoided, for example cable connections.                                | 60 D           | thixo                    | 7               | 1,30                         | 127:100            |
| <b>RE 12800</b><br><b>RE 1020</b>  |             | Applications requiring long manipulation time, for example manual applications. Capacitors. Transformers. Relays.            | 80 D           | 1.200                    | 65              | 1,38                         | 100:28             |
| <b>RE 12840</b><br><b>RE 1010</b>  |             | Multipurpose for all kinds of transformers and capacitors.   | 86 D           | 800                      | 30              | 1,58                         | 100:30             |
| <b>RE 12851</b><br><b>RE 1030</b>  |             | Transformers and capacitors requiring fire retardant properties.   | 85 D           | 3.800                    | 10              | 1,63                         | 100:20             |
| <b>RE 12885</b><br><b>RE 1030</b>  |             | Transformers, Capacitors operating in severe industrial environments (temperature, moisture).                                | 88 D           | 2.000                    | 13/30           | 1,53                         | 100:40             |
| <b>EPOXY RESINS</b>                |             |  |                |                          |                 |                              |                    |
| <b>RE 22801</b><br><b>RE 2120</b>  |             | Sensitive electronics that require resistance to thermal shock. PCB components.  | 62 D           | 3.500                    | 180             | 1,47                         | 100:20             |
| <b>RE 22801</b><br><b>RE 2050</b>  |             | Multipurpose: Capacitors, relays, coils, bobines, industrial applications requiring an extremely resistant resin. <b>UL</b>  | 80 D           | 4.200                    | 50              | 1,53                         | 100:11             |
| <b>RE 22891</b><br><b>RE 2030</b>  |             | Multipurpose: Electric motors, transformers, coils, relays. High temperature resistance +150°C. <b>UL</b>                    | 88 D           | 3.000                    | 200             | 1,49                         | 100:12             |

\* Tecam Gel Timer, mentioned the pot life of the available variations of resin.

- 6 PRODUCTION SITES & RESEARCH CENTERS:
- 12 SUBSIDIARIES AROUND THE WORLD:
- WORLDWIDE MORE THAN 60 DISTRIBUTORS



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