

# ENCAPSULATION & POTTING RESINS

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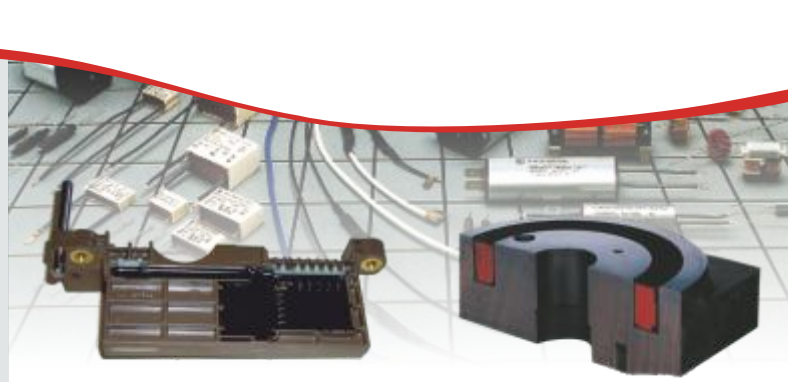
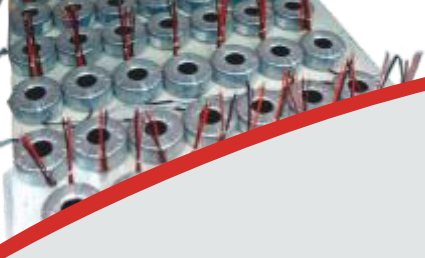
ROHS COMPLIANT  
SOLVENT FREE  
HALOGEN FREE  
ADAPTABLE SYSTEMS



ISO 9001

ISO 14001

**Axson**  
TECHNOLOGIES



## 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.*

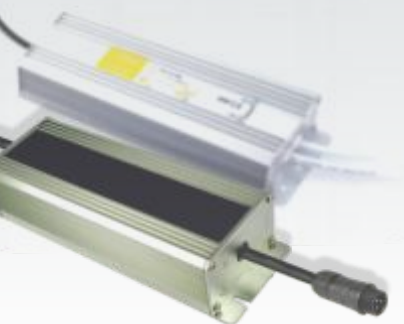
*Our resin systems can withstand the high temperatures associated with lead-free soldering processes. Their purity is combined with excellent mechanical and chemical stability, minimizing contamination and maximizing safety during the handling of sensitive electronic components.*

*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. Choice of three different



#### 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.



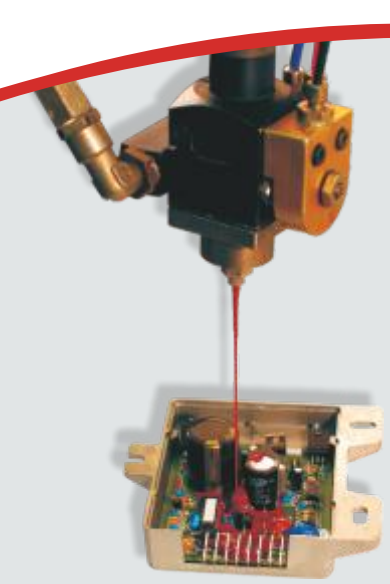
#### RE 11820/RE 1020

Excellent dielectrical properties. Fungus resistance. Excellent moisture resistance. A high quality, high-end product. Choice of three different pot lives.



#### 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 two 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.

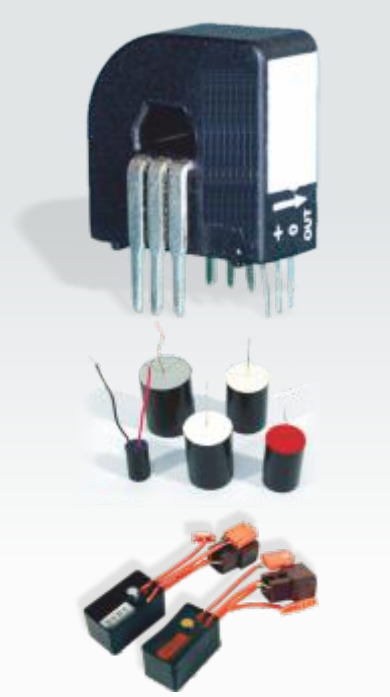


#### RE 12560/RE 1020

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

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

#### RE 12840/RE 1010

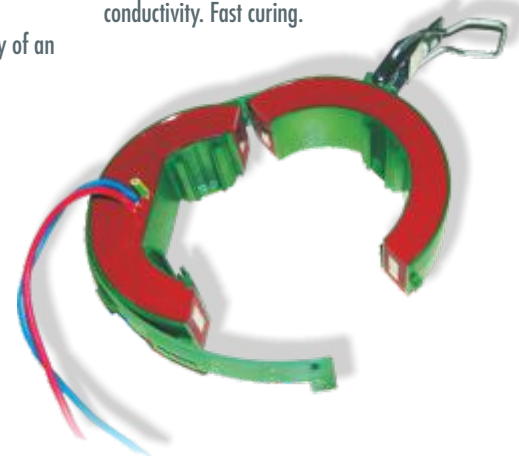
Low viscosity. Ease of processing. Good thermal conductivity. Electric heat dissipation and thermal conductivity. Offers the rigidity of an epoxy with the tenacity of a polyurethane.

#### 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. Choice of three different pot lives.



## 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> <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> <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> <b>RE 1020</b>		Sensitive electronic components requiring UL 94 V0. Sensors, printed circuit boards. <b>UL 746B: RTI approved 120°C.</b>		2.400	30/60	1,29	100:10
<b>RE 11600</b> <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> <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> <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> <b>RE 1020</b>		Radio transmitters. Applications for electronic components used in an environment where high moisture resistance is desired.	82 A	4.500	10/40	1,10	100:25
<b>RE 11880</b> <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> <b>RE 1010</b>		General purposes. Ideal for intricate parts requiring UL 94 V0. Railways fire retardants approved.		1.100	10/30/40/60	1,55	100:16
<b>RE 12500</b> <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> <b>RE 1020</b>		Low and medium voltage transformers. Converters. <b>UL 746B: RTI approved 150°C.</b>		1.650	22	1,57	100:14
<b>RE 12551</b> <b>RE 1020</b>		Small transformers. Electronic cards. Relays. Electronic filters. Applications requiring a fire resistance.		2.400	30/60	1,55	100:14
<b>RE 12560</b> <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> <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> <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> <b>RE 1010</b>		Multipurpose for all kinds of transformers and capacitors.	86 D	800	30	1,58	100:30
<b>RE 12851</b> <b>RE 1030</b>		Transformers and capacitors requiring fire retardant properties.	85 D	3.800	10	1,63	100:20
<b>RE 12885</b> <b>RE 1030</b>		Transformers, Capacitors operating in severe industrial environments (temperature, moisture).	88 D	2.000	13/30/60	1,53	100:40
<b>EPOXY RESINS</b>							
<b>RE 22801</b> <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> <b>RE 2050</b>		Multipurpose: Capacitors, relays, coils, bobines, industrial applications requiring an extremely resistant resin.		4.200	50	1,53	100:11
<b>RE 22891</b> <b>RE 2030</b>		Multipurpose: Electric motors, transformers, coils, relays. High temperature resistance +150°C.		3.000	200	1,49	100:12

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

## OUR GLOBAL PRESENCE:

- 6 production sites with research centers worldwide
- 12 subsidiaries around the world
- More than 60 international distributors
- Global support guaranteed

Axson Iberica  
Tel. +34 9 32 25 16 20

Axson Italia  
Tel. +39 02 96 70 23 36

Axson Germany  
Tel. +49 6 07 44 07 11-0

Axson UK  
Tel. +44 16 38 66 00 62

Axson Japan  
Tel. +81 5 64 26 25 91

Axson China  
Tel. +86 21 58 68 30 37

Axson India  
Tel. +91 20 25 56 07 10/11

Axson North America  
Tel. +15 1 76 63 81 91

Axson Mexico  
Tel. +52 55 52 64 49 22

Axson France  
Tel. +33 1 34 40 34 60

Axson Slovakia  
Tel. +42 1 76 42 25 26

## AXSON TECHNOLOGIES

Member of Axson France S.A.S.

Tel. (+33) 01 34 40 34 60 - Fax (+33) 01 34 21 97 87 - Email: dielectric@axson.com

More information and downloads are available on the website:

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