

WACKER Silicone Encapsulants and Potting Compounds



Description

Also available to buy online at [!\[\]\(666e09182d4cd268646ea700ea60dcdf_img.jpg\)](#)
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Silicone encapsulants from WACKER are effective for the potting and encapsulation of electronic control units, sensors, printed circuit boards, semiconductor devices or microchips. Potting or encapsulation provides efficient protection from the environment, assisting in reliable operation over the lifetime of electronic devices.

We offer one and two component WACKER products for potting and encapsulation applications. Silicone gels offer minimal thermal stress on sensitive parts and ensure that the device will work properly even when exposed to extreme temperature fluctuations or strong vibrations. For sensor applications, gels characterised by particularly low volatility and low bleed are becoming increasingly important.

Features & Benefits

- High thermal shock resistance
- Low shrinkage
- Good adhesion including to polymer housings
- Low outgassing

WACKER Silicone Encapsulants and Potting Compounds




- Low uncured-silicone bleed
- Formulations from Shore 00-55 to A80
- Transparent versions available

Specifications

Product	Characteristic	Volume Resistivity (ohm.cm)	Dielectric Strength (KV/mm)	Colour	Hardness (Shore A)	Viscosity (mPas)	Temperature Range
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<div>Elastosil E10</div> <div></div>	<p>Flowable sealant with excellent heat stability up to 250°C, long-term elasticity under thermal stress, and good mechanical properties. Low hardness. Applications include sealing of heating elements.</p>	10^14	21	Red	25	8,000	up to 250°C
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Elastosil E50N 	Food compliant, transparent silicone for coating and potting applications including textile coatings. Medium hardness, more rigid than E43N.			Transparent	35	50,000	up to 180°C
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Elastosil N2034	Flowable, non-corrosive black silicone for technical applications including bonding, sealing, coating, potting and gasketing. Self-levelling with medium hardness when cured, and flame retardant.			Black	35	25,000	-50 to 180°C
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<div>Elastosil RT 601</div> <div></div>	Highly transparent low viscosity electronics potting compound for circuit protection. Medium cured hardness. Also useful for optical applications (e.g. solar panels). Food compliant.	10^15	23	Transparen	45	3,500	150°C
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<div>Elastosil RT 602</div> <div></div>	Low viscosity silicone potting compound with rapid heat cure, medium cured hardness and excellent heat stability. Food compliant.	10^15		Light grey	30	3,500	200°C
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<div>Elastosil RT 604</div> <div></div>	<div>Softer than RT 601. Highly transparent very low viscosity electronics potting compound for circuit protection. Also useful for optical applications (e.g. solar panels). Food compliant.</div>	<div>10^15</div>	<div>23</div>	<div>Transparen</div>	<div>25</div>	<div>800</div>	<div>150°C</div>
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<div>Elastosil RT 607</div> <div></div>	Very hard, flame retardant silicone potting compound with rapid heat cure and excellent heat resistance. Food compliant.	10^15	23	Reddish-brown	55	10,000	210°C
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Elastosil RT 745	Tough gel with primerless adhesion and rapid heat cure. Applications include potting and encapsulation of components for measurement and control, sensor technology, and electronics including automotive.	10^16		Translucent brownish	15	1,000	160°C
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WACKER Silicone Encapsulants and Potting Compounds



Elastosil RT 745 S	Softer version of Elastosil RT 745. May be suitable for some automotive applications involving water immersion.	10^15		Translucent-brownish	Shore 00 - 37	1,000	160°C
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<div>SilGel 612</div> <div></div>	<p>Crystal clear silicone gel well suited to encapsulation of LEDs, manufacture of solar panels, and electronics applications</p> <p>Sealing of air filtration systems for clean rooms. Very low bleed, good adhesion, low stress, flame retardant. Rapid heat cure.</p>	10^15	23	Transparent	Very soft gel	1,000	160°C
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WACKER Silicone Encapsulants and Potting Compounds



SilGel 613	Similar to SilGel 612, but is lower viscosity and works with catalysts to speed up curing, including a UV-curing catalyst.			Transparent	Very soft gel	150	160°C
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<div>Silpuran 4200</div> <div></div>	Medical-grade, biocompatible acetoxycuring adhesive sealant which meets the requirements of ISO 10993 and USP Class VI. Fast skin time; medium hardness.			Translucent	35	300,000	
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WACKER Silicone Encapsulants and Potting Compounds



Elastosil RT K	Silicone potting compound, condensation curing with Cat T catalyst. Flowable, with good post mix self deaeration. Medium hardness.	10^14	23	Light grey	45	7,000	-50°C to 180°C
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WACKER Silicone Encapsulants and Potting Compounds



Elastosil RT 426	Potting and encapsulation compound for electronics and lighting applications with excellent heat resistance and high hardness.			Reddish-brown	60	15,000	200°C
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Semicosil 961 TC	Gap filler which cures to a soft, tacky rubber. Highly thermally conductive interface material for electronic heat sink applications.	10^13	8	Yellow	25	130,000	-50° to 130°C
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For additional specifications, view our [selector guide](#).

Safety Data Sheets



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For the latest SDS for this product, please e-mail msds@intertronics.co.uk

Other Information

See how our Wacker SilGel 612 works as part of a real application in these [Case Studies](#):

<p>CASE STUDY</p> <p>Wacker SilGel® 612 Clear silicone potting compound</p>   <p>intertronics adhesives, coatings, sealants & equipment for your manufacturing and technology applications</p>	<p><u>Potting LED strips for outdoor signage made easy with silicone gel</u></p> <p>A UK manufacturer of outdoor signage and lighting products was seeking to encapsulate their LED strips to protect them from environmental damage, whilst maintaining a desirable aesthetic in the finished product. Wacker SilGel 612 fit the bill.</p>
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WACKER Silicone Encapsulants and Potting Compounds



Application Insight

ELECTRONICS ASSEMBLY POTTING

Potting PCBs within wireless remote-control devices

Elastosil RT 601



Application Insight – Electronics Assembly Potting

Potting PCBs within wireless remote control devices using Elastosil RT 601.

Ordering Information

WACKER Silicone Encapsulants and Potting Compounds



01865

842842



orders@intertronics.co.uk

- Name*
- Company*
- Phone*
- Email*
- Post code*

If you're in the UK, knowing your postcode would help us get in touch even more quickly. If you're outside the UK, please indicate your country.

- Tell us about your application

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Supplied by:



INTERTRONICS
12a Station Field Industrial Estate, Banbury Road, Kidlington
Oxfordshire England OX5 1JD
t 01865 842842 e info@intertronics.co.uk

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