Press release

November 12, 2026

Wacker Chemie AG
Corporate Communications
Gisela-Stein-Strasse 1
81671 Munich, Germany
www.wacker.com

WACKER showcases self-adhesive silicone rubber for medtech applications and silicone gels for transdermal patches at COMPAMED

- ELASTOSIL® LR 5471 liquid silicone rubber provides excellent mechanical properties and adheres to a wide range of metals and thermoplastics such as PBT and PET.
- Novel product can be used in sensitive areas even without postcuring.
- In Hall 8A, Booth G04, WACKER is also showcasing silicone adhesives for transdermal patches.

Munich – From November 16 to 19, WACKER will be showcasing the first non-postcure silicone rubber with self-adhesive properties at this year's COMPAMED medical technology trade fair. Known as ELASTOSIL® LR 5471, this silicone rubber cures to form a silicone elastomer with an extremely low volatile content. This makes it possible for hard/soft combinations made of ELASTOSIL® LR 5471 to be used in the food, medical and baby-care sectors without postcuring. Based in Hall 8A, Booth G04, WACKER will also be presenting silicone adhesives for transdermal patches and silicones for pharmaceutical and medical applications.

Self-adhesive liquid silicone rubber grades can be used to produce a broad range of hard/soft combinations very efficiently. Internal adhesion promoters added to the silicone polymer ensure reliable adhesion. Ideally, the liquid silicone rubber can be molded onto the hard component in the injection-molding machine without surface pretreatment, enabling cost-effective production of thermoplastic/silicone elastomer and metal/silicone elastomer combinations.

This also applies to ELASTOSIL® LR 5471, a self-adhesive liquid silicone rubber that achieves excellent adhesion values on metals and thermoplastics. During in-house testing, an adhesion of 28 N/mm (as per ISO 813) was measured on polybutylene terephthalate (PBT). Equally good results were achieved on polyethylene terephthalate (PET).

Standard liquid silicone rubber involving food contact or intended for medical applications usually has to be treated for several hours in a postcure oven. This is not required for ELASTOSIL® LR 5471. Measurements on test plates 2 mm thick show that the cured silicone exhibits a volatile content of less than 0.4 percent. Molded articles made of ELASTOSIL® LR 5471 therefore comply with recommendations issued by the German Federal Institute for Risk Assessment BfR even without postcuring (Recommendation XV. Silicones).

What is more, the mechanical properties of the silicone were also optimized. Non-postcured parts achieve an elongation at break of 570 percent and a tear strength of 38 N/mm (as per ASTM D 624 B). ELASTOSIL® LR 5471 therefore provides sufficiently high elasticity and mechanical strength for demanding applications in sensitive areas. Possible fields include seals and flexible scrapers for cookware, baking and kitchen utensils, patches for surgical masks and therapeutic devices as well as soft components for pacifiers and baby bottle teats.

ELASTOSIL® LR 5471 is an addition-curing material consisting of two components that are compounded before processing. It is available in 40 and 50 Shore A hardnesses and is ideal for the large-scale production of overmolded parts (thermoplastic/elastomer).

Silicones for transdermal patches

Silicone gels have been used as atraumatic fixing aids for several years. They are highly skin-compatible and can be removed gently, despite adhering readily to the skin. SILPURAN® silicone adhesives are suitable for fixing sensors, dosing devices, ostomy bags, and other medical technology components.

COMPAMED now gives WACKER an opportunity to present a further area of application for such products: transdermal patches. As a stable, biocompatible and breathable matrix, silicone gels can store medical or cosmetic active ingredients and release them on the skin at a controlled rate over time. In a recently conducted study, WACKER examined 20 active ingredients that are suitable for such applications. The ingredients include over-the-counter therapeutics, such as ibuprofen, anti-inflammatory drugs, herbal remedies, vitamins and dietary supplements.

An additional benefit of these silicone adhesives is that they offer customizable release profiles which control the amount, the rate and the duration of the release. Active ingredients can therefore be delivered at a constant and steady rate, via an initial burst or after a prolonged delay. Thus, silicone gels are more than just carrier materials. They form the basis for the next generation of transdermal systems that are gentle on the skin, can be dosed with precision and are highly versatile in use.

Expert and research team lead Ufuk Karabiyik will present further results of the study on Wednesday, November 18, at 2:00 p.m. at the COMPAMED Suppliers Forum in Hall 8b / G40. (Presentation title: “Transdermal active delivery study results: superior release of active ingredients from silicone gel adhesives.”)

Silicones for the pharma industry

At COMPAMED, WACKER will also showcase silicone-based solutions for pharmaceutical and medical uses. This time, specialty silicones from WACKER’s SILPURAN® and ELASTOSIL® product lines are in the limelight. Pure, sterilizable and chemically as well as physically resistant, these silicones are ideally suited for medical applications. WACKER’s extrudable solid silicones enable the efficient production of high-quality pharmaceutical and medical tubing. For injection or compression molded components, special liquid and high consistency silicone rubber grades are the material of choice. The range of applications spans many fields, including ventilator masks and instrument handles as well as sterilization mats, seals, membranes, and medical cables.

Visit WACKER at COMPAMED 2026 in Hall 8A, Booth G04.



WACKER is showcasing ELASTOSIL® LR 5471 at COMPAMED. This liquid silicone rubber is self-adhesive, which means that hard/soft combinations can be produced very efficiently. What is more, rubber parts made from this silicone grade can be used in medical technology or food-contact applications without the need for postcuring. (Source: Wacker)

Additional information

Florian Degenhart
Media Relations
Tel. +49 89 6279-1601
Florian.Degenhart@wacker.com

The company in brief
WACKER is a global company with state-of-the-art specialty chemical products found in countless everyday items, with applications ranging from tile adhesives to computer chips. The company has a global network of 27 production sites, 22 technical competence centers and 47 sales offices. With more than 16,000 employees, WACKER generated annual sales of around €5.5 billion in fiscal 2025.

WACKER operates through four business divisions. The Silicones and Polymers chemical divisions supply products (silicones, polymeric binders) for the automotive, construction, chemical, consumer goods and medical technology industries. Biosolutions, the life sciences division, specializes in bioengineered products such as biopharmaceuticals and food additives. Polysilicon produces hyperpure polysilicon for the semiconductor and photovoltaic industries.

www.wacker.com

Follow us on