

# PRESS RELEASE

Number 30

## K 2019: 21st International Trade Fair for Plastics and Rubber

### WACKER Showcases Self-Adhesive Liquid Silicone Rubber with Low-Friction Surfaces

**Munich, July 30, 2019 – WACKER, the Munich-based chemical group, will be showcasing its portfolio of self-adhesive liquid silicone rubbers with low coefficients of friction at the K 2019 International Trade Fair for Plastics and Rubber. The portfolio comprises two new product lines: ELASTOSIL® LR 3671 for applications in food technology and ELASTOSIL® LR 3675 for automotive applications. WACKER will also present SILPURAN® 6760/50, a grade dedicated to medical applications with comparable surface properties. All three products are self adhesive to metals and selected thermoplastics. When cured they form elastomers with dry, low-friction surfaces, enabling cost-effective large-scale production of injection-molded hard/soft composites. K 2019 takes place in Düsseldorf, Germany, from October 16 to 23.**

The ELASTOSIL® LR 3671 and ELASTOSIL® LR 3675 product lines will be unveiled to a broad technical audience for the first time at K 2019, with SILPURAN® 6760/50 having already made its debut at the medical-technology tradeshow COMPAMED. WACKER has combined in these products two technologies that are firmly established in the silicone compounding industry, with a proven track

record in numerous applications: silicones with self-adhesive properties and those featuring intrinsically low-friction surfaces.

What is new is the combination of both technologies in one single product, achieved by means of a special formulation concept. The liquid silicone rubber grades can be customized for different fields of application by selecting appropriate formulation ingredients.

Silicone elastomers made from ELASTOSIL® LR 3671, ELASTOSIL® LR 3675 and SILPURAN® 6760/50 have coefficients of friction that are 50 to 70 percent lower than those of comparable standard silicone rubber. The friction-lowering effect is achieved without exuding oil as happens in oil-bleeding silicone elastomers. That makes the products ideal for use in the manufacture of components with low-friction surfaces that must be kept oil-free.

At the same time, the new liquid silicone rubbers are self-adhesive. Like other WACKER self-adhesive liquid silicone rubbers, the new compounds adhere to thermoplastics such as polyamide and polybutylene terephthalate, two polymers commonly used as the hard component in two-component items. Strong chemical bonding takes place on application, eliminating the need to pretreat the plastics. The same is true for metal surfaces: here, too, the new products exhibit excellent adhesion without any pretreatment in many cases.

With appropriate machinery and mold technology, the new liquid silicone rubbers can be molded directly onto the substrates. This enables fast, cost-effective large-scale production of thermoplastic-silicone elastomer and metal-silicone elastomer composites.

**ELASTOSIL® LR 3671** was especially designed for food contact. After appropriate post-curing, articles are safe for food contact pursuant to the recommendations of the German Federal Institute for Risk Assessment (BfR) and the requirements of the US Food and Drug Administration (FDA). Potential applications include, for example, shaft seals in food processors and sealing elements in closures of thermos flasks.

Rubber parts made from **SILPURAN® 6760/50** have passed selected tests for biocompatibility according to ISO 10993 and United States Pharmacopeia Class VI. That makes it the grade of choice for the application as piston seal for use in medical technology or in the pharmaceutical industry such as syringes or metering pumps.

The **ELASTOSIL® LR 3675** product line was developed for use in automotive technology. Its special formulation ingredients have been chosen to form an exceptionally strong bond with the hard component. After curing, it already exhibits excellent elastic extension recovery and very good mechanical properties even without post-curing. This allows manufacturers to eliminate that very time-consuming, energy-intensive step from their processes. Areas of application include connector housings with radial seals applied by injection molding and single-wire seals.

More information available at [www.wacker.com/k2019](http://www.wacker.com/k2019).

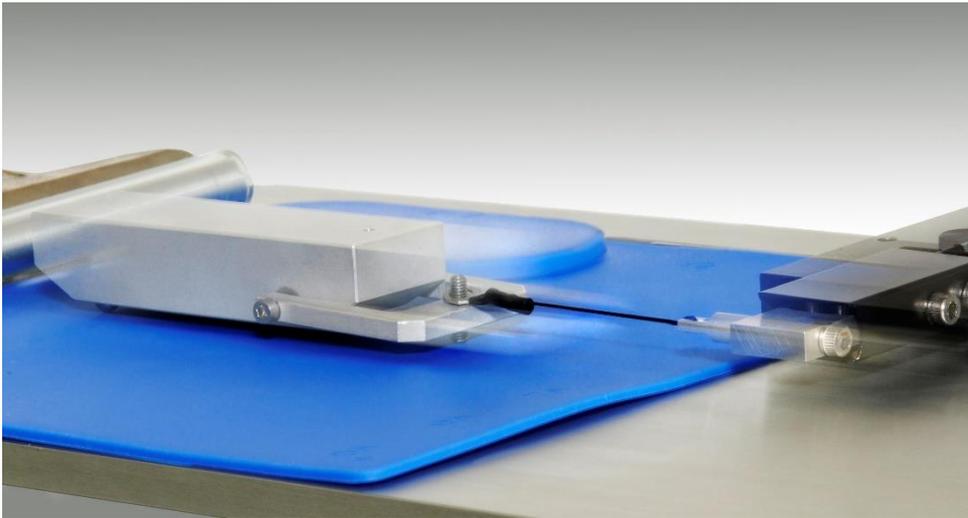
**Visit WACKER at K 2019 in Hall 6, Booth A10.**



Connector housing with injection-molded orange radial seal made from ELASTOSIL® LR 3675. The self-adhesive liquid silicone rubber has a low-friction surface, which makes it easy to install. WACKER will be exhibiting the product for the first time at this year's plastics show K 2019. (Photo: WACKER)



The self-adhesive liquid silicone rubber SILPURAN® 6760/50 is biocompatible and, unlike standard silicones, has a significantly smoother surface. That makes the product ideal for manufacturing medical equipment such as syringes or metering pumps. WACKER, the Munich-based chemical group, will be showcasing the new liquid silicone rubber at the K 2019 Trade Fair for Plastics and Rubber. (Photo: WACKER)



ELASTOSIL® LR 3671, ELASTOSIL® LR 3675 and SILPURAN® 6760/50 are self-adhesive, non-oil-bleeding liquid silicone rubbers that exhibit low-friction surfaces after they are cured. Measurements show that their coefficients of dynamic friction are 50 to 70 percent lower than those of comparable standard silicone elastomers. WACKER will be showcasing the products at this year's plastics show K 2019. (Photo: WACKER)

Note:

These photos are available for download at:

<http://www.wacker.com/pressreleases>

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**The Company in Brief:**

WACKER is a globally-active chemical company with some 14,500 employees and annual sales of around €4.98 billion (2018). WACKER has a global network of 24 production sites, 22 technical competence centers and 50 sales offices.

**WACKER SILICONES**

Silicone fluids, emulsions, rubber grades and resins; silanes; pyrogenic silicas; thermoplastic silicone elastomers

**WACKER POLYMERS**

Polyvinyl acetates and vinyl acetate copolymers and terpolymers in the form of dispersible polymer powders, dispersions, solid resins and solutions

**WACKER BIOSOLUTIONS**

Biotech products such as cyclodextrins, cysteine and biologics, as well as fine chemicals and PVAc solid resins

**WACKER POLYSILICON**

Polysilicon for the semiconductor and photovoltaic industries