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PRESS RELEASE

Number 12

A Memorable Anniversary for a Successful WACKER Brand
60 Years of ELASTOSIL®

Munich, March 4, 2015 – One of the best-known and most successful brands of Munich-based chemicals group WACKER is turning 60: on March 4, 1955, the company sought trademark protection from the German Patent Office for the name ELASTOSIL®. Since then the number of different products bearing the registered trademark has grown to nearly 3000. ELASTOSIL® silicones are used in virtually all branches of industry, from automotive to aerospace. WACKER is celebrating this milestone with a website (www.wacker.com/elastosil60) dedicated to telling the brand's remarkable success story.

Employees are marking the 60th birthday of ELASTOSIL® on the group website www.wacker.com with a series of reports about the varied application areas, trends and innovations surrounding this silicone brand. The series opens with a welcoming address by Peter Summo, head of the Engineering Silicones business unit. “A trade-mark application was filed for ELASTOSIL® on March 4, 1955. Since then, this extraordinary technology has repeatedly provided the basis for high-performance, economical and sustainable products.”

ELASTOSIL® silicones have become an essential, integral part of many applications due to their versatility and unique property profile. Whether for airbags, keyboards, safety and fire-resistive cables,

mold-making, sealing and medical technology – silicone elastomers provide key benefits to manufacturers and end customers alike. The brand is also renowned for the role it plays in technical innovations that lead to new products and open up new opportunities for fabricators. One such example is ELASTOSIL® Film, the latest member of the brand family. This ultrathin high-precision film of silicone rubber is used in the production of novel sensors, actuators and generators. “Our high-precision silicone film, which is available as roll stock, opens up totally new application possibilities for the industry. We have only just scratched the surface,” says Summo. “Many products nowadays tend to come and go quickly. But not ELASTOSIL®. This is a brand you can rely on.”

The brand name ELASTOSIL®, which is a contraction of “elastomer” and “silicone”, encompasses numerous silicone elastomers from the WACKER product range. Unlike silicone fluids or silicone resins, they are by nature elastic and rubber-like. While silicone rubbers constitute the largest group numerically, the brand portfolio includes other silicone grades, such as silicone rubber dispersions, silicone sealants and additives.

The brains behind WACKER silicones and the man behind the ELASTOSIL® brand was the chemist Dr. Siegfried Nitzsche, who commenced his pioneering research into silanes and silicones at WACKER’s initial production site in Burghausen, Germany, in 1947. Over the years that followed, WACKER scientists developed a range of different silicone polymers and all kinds of crosslinking mechanisms as they systematically built up the comprehensive ELASTOSIL® portfolio.

Silicone rubbers consist essentially of silicone polymers and fillers. They undergo high-temperature (HTV silicones) or room-temperature vulcanization (RTV silicones and liquid silicone rubber respectively) with suitable reactants, during which the uncured, flowable compound in a plastic state is transformed into an elastomeric rubber with a three-dimensional structure.

Silicone rubbers are flexible at low temperatures as well as being resistant to heat and aging (UV, ozone, radiation). They are easy to process and have good mechanical properties that remain unchanged over a wide temperature range. Moreover, they have a neutral taste and a low environmental impact. As the properties of the silicone rubbers can be varied within wide limits, developers can tailor them to all kinds of applications and adjust them in response to growing technical requirements – this has been a key factor underpinning the success of the ELASTOSIL® brand. Aside from tried-and-true silicone sealants widely employed throughout the construction industry, the portfolio contains highly specialized rubber grades, such as extremely heat-resistant and high-tear-strength grades. Various self-adhesive, electrically conducting, low-friction and magnetic silicones are also available.

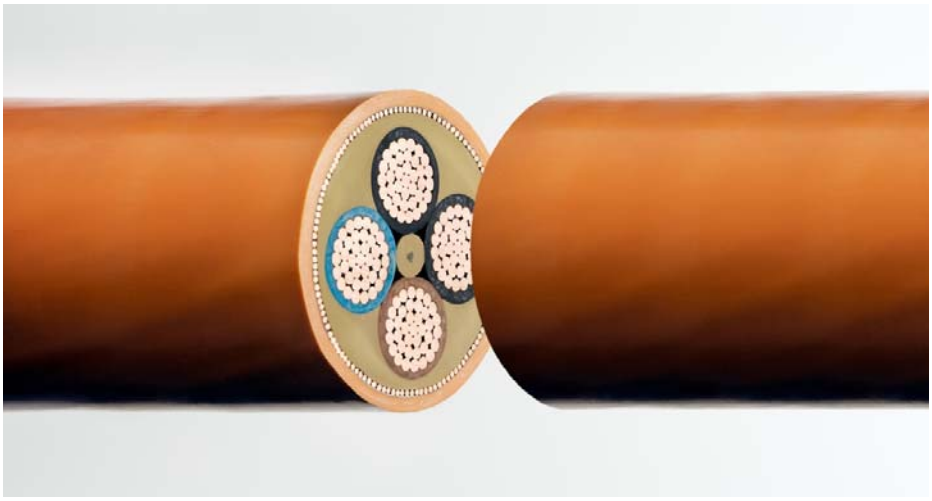
The ELASTOSIL® range has a product to suit nearly every industrial application and every processing method, whether this be extrusion, injection molding or dispensing. Molded parts, profiles and tubing, joint seals, bonded components, coated surfaces and exact reproductions can all be made with silicone rubber.

ELASTOSIL® silicone products are employed in all kinds of industrial applications. Their near-to unlimited potential makes them ideal for applications in many industries – such as automotive and mechanical engineering, electronics and electrics, textiles, baby articles, toys, domestic appliances and sports articles, as well as the construction industry.

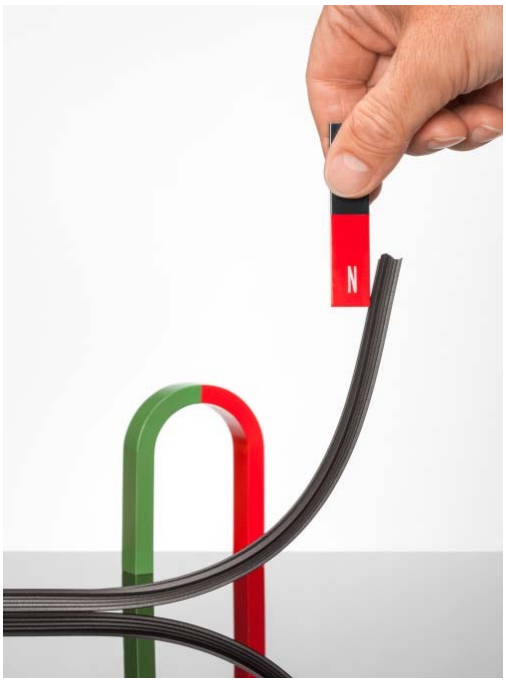
For more details about ELASTOSIL®'s 60th anniversary, visit www.wacker.com/elastosil60.

In the production of electronic controllers and sensors, ELASTOSIL® silicones seal housing components, bond individual elements and encapsulate electronic parts. Specialty ELASTOSIL® grades are particularly stable to automotive fuels and oils. (Photo: Wacker Chemie AG).

ELASTOSIL® silicone rubber has been used to reliably seal joints for many years. It is used not only for building joints but also for joints in the household and industrial sectors. (Photo: Wacker Chemie AG).



When fire breaks out, flame-resistant cables must keep functioning perfectly until rescue work and fire-fighting are complete. In the presence of fire, special ELASTOSIL® silicone rubbers harden into a ceramic layer that continues to provide electrical insulation even at temperatures of up to 1000 °C. (Photo: Wacker Chemie AG).



ELASTOSIL® silicone rubbers are true all-rounders. Aside from extremely heat-resistant and high-strength grades, the portfolio includes specialty grades that possess magnetic properties. Extrudable solid silicone rubber ELASTOSIL® R 781/80 is detectable and can be used in a host of applications, such as magnetic closures. (Photo: Wacker Chemie AG).

Mold-making compounds made from ELASTOSIL® silicone rubber are flowable, durable and easy to process. They cure to elastomers that possess excellent self-release properties and good transparency. ELASTOSIL® therefore meets all the key requirements on products used for prototyping, where high-volume, economical production is essential.
(Photo: Wacker Chemie AG).

ELASTOSIL® Film is one of the more recent innovations from Munich-based chemicals group WACKER. This precision film, made from silicone, is thinner than a human hair, extremely flexible and durable. The continuous film lends itself to numerous applications, including sensors, actuators and energy-saving electrical relays. (Photo: Wacker Chemie AG).

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 16,000 employees and annual sales of around €4.48 billion (2013).
WACKER has a global network of 25 production sites, 21 technical competence centers and 52 sales offices.

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

WACKER POLYMERS
Polyvinyl acetates and vinyl acetate copolymers in the form of dispersible polymer powders, dispersions, solid resins and solutions used as binders for construction chemicals, paints and coatings, adhesives, plasters, textiles and nonwovens, as well as for polymeric materials based on renewable resources

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

Siltronic
Hyperpure silicon wafers and monocrystals for semiconductor components