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PRESS RELEASE

Number 45

Fakuma 2017
WACKER Presents Heat-Resistant Solid Silicone Rubber for the Household-Product and Automotive Sectors

Munich, July 27, 2017 – WACKER, the Munich-based chemical company, will be premiering its new ELASTOSIL® R *plus* 4350/55 solid silicone rubber at this year's international trade fair for plastics processing Fakuma. An outstanding property of this extrudable and addition-curing silicone grade is its high resistance to heat. Heat stabilizers enable the solid silicone to withstand temperatures of up to 300 °C for several days, without any substantial modifications to its elasticity or mechanical properties. Even temporary peaks of up to 400 °C pose no problem. The new solid silicone is therefore suitable for components used in oven and stove doors or in engine compartments, for example, which are exposed to heat repeatedly or over lengthy periods. Fakuma will be held in Friedrichshafen, Germany, from October 17 to 21.

ELASTOSIL® R *plus* 4350/55 is a silicone rubber for formulating heat-resistant, addition-curing silicone elastomers. It reveals its properties to optimum effect in combination with heat stabilizers of the ELASTOSIL® AUX STABILIZER H series which are added to the base rubber. The type of stabilizer and the amount used

have a significant influence on the thermal properties of the cured rubber. The silicone grade is easy to process in extruders.

ELASTOSIL® R *plus* 4350/55 can therefore be used to make extremely heat-resistant tubing and sealing profiles that withstand temperatures of up to 300 °C for several days – and even temperatures of up to 400 °C for short periods – without any damage. Heat tests at 200 °C and 300 °C, respectively, show that key mechanical properties such as Shore hardness and elongation at break change very little even after 2,000 hours, i.e. 80 days. In this way, manufacturer's specifications for products such as the sealing profiles used in modern ovens are clearly exceeded.

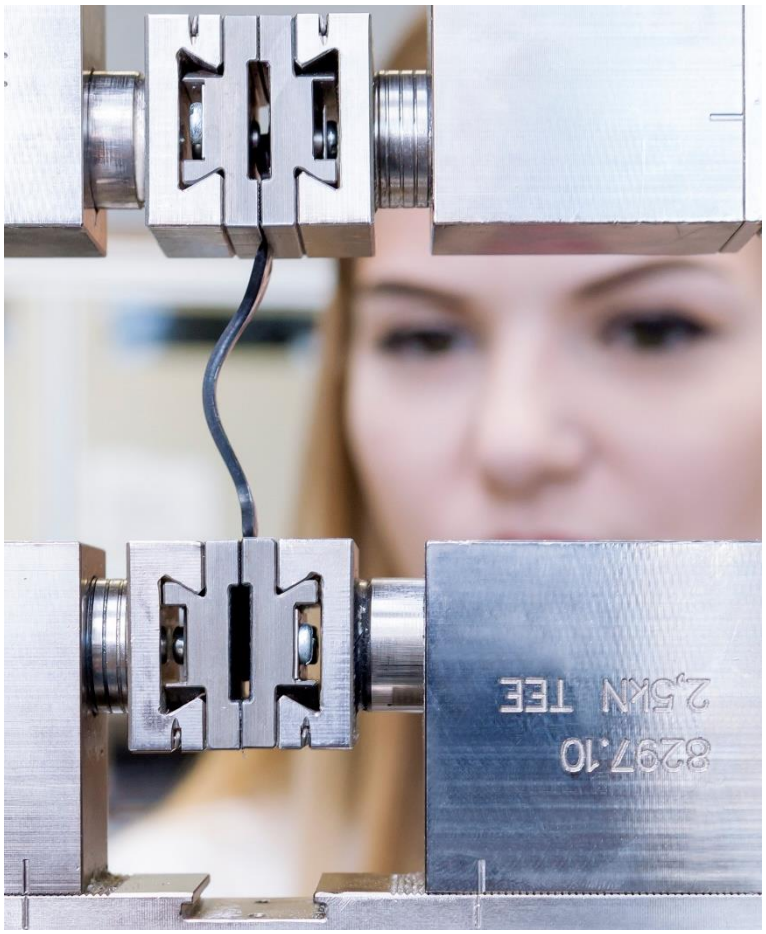
After it has cured, ELASTOSIL® R *plus* 4350/55 achieves a Shore A hardness value of 55 which is ideal for manufacturing heat-resistant profile gaskets, such as for oven and stove doors or for engine-compartment parts. The new silicone rubber also features good resistance to superheated steam. Consequently, seals made of ELASTOSIL® R *plus* 4350/55 can also be used in applications that require resistance to both heat and superheated steam. Carefully postcured grades comply with the requirements of the German Federal Institute for Risk Assessment (BfR) and the US Federal Drug Administration (FDA) for food contact.

WACKER supplies ELASTOSIL® R *plus* 4350/55 as a base rubber blend without additives such as colorants or heat stabilizers. As a result, processors can customize the rubber

blend exactly to the specific application. In this regard, WACKER can provide processors with an extensive portfolio of additives.

Visit WACKER at Fakuma 2017, Hall A6, Booth A6-6310.

WACKER, the Munich-based chemical group, will be debuting the new addition-curing silicone rubber ELASTOSIL® R *plus* 4350/55 at this year's Fakuma tradeshow. The grade can be used to produce heat-resistant tubing and sealing profiles, such as for oven and stove doors and engine-compartment parts. (Photo: WACKER)



Sealing profiles and tubing made of ELASTOSIL® R *plus* 4350/55 resist temperatures up to 400 °C. WACKER will present its new silicone rubber grade at this year's Fakuma tradeshow. (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 13,450 employees and annual sales of around €4.6 billion (2016, excluding Siltronic).
WACKER has a global network of 23 production sites, 19 technical competence centers and 49 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