Wacker Chemie AG
Hanns-Seidel-Platz 4
81737 München, Germany
www.wacker.com

PRESS RELEASE

Number 29

K 2010
WACKER Presents New Solid Silicone Rubber Grades for Applications with High Fire Safety Requirements

Munich, June 14, 2010 – WACKER, the Munich-based chemical company, will present at the 18th International Trade Fair for Plastics and Rubber (K 2010) new solid silicone rubber grades that meet the highest fire safety standards. Sold under the name ELASTOSIL® R 770, these products cure to self-extinguishing and flame-resistant elastomers. When they burn, they generate little smoke and emit no toxic fumes. ELASTOSIL® R 770 rubber grades can be used wherever fire safety is an issue, such as in rail vehicles and aircraft. K 2010 will take place from October 27 to November 3 in Düsseldorf, Germany.

The new solid silicone rubber grades can be extruded and molded to products that combine typical silicone rubber properties with exceptional fire safety characteristics. The cured elastomer is heat stable and remains permanently elastic even at low temperatures down to -40 °C, without the need for a plasticizer.

ELASTOSIL® R 770 is also difficult to ignite. Flames die out quickly once the ignition source has been removed. The fumes given off are not toxic. For example, no hydrogen chloride gas is released, as all ELASTOSIL® R 770 grades are formulated so as to be halogen-free.

Moreover, because smoke density is low, visibility in a fire is hardly affected, which, in turn, enables a safe and quick evacuation.

These properties render the ELASTOSIL® R 770 series ideal for the production of flexible molded articles, profiles, panels, film and fabric-reinforced silicone strips for use in railway cars, underground and suburban trains, planes, ships and buses. Typical applications include door, finger-guard and wall profiles for high-speed trains, bellows for connecting carriages in trains and articulated buses, and fire-proof, acoustic insulation mats for planes, trains and ships.

The new solid silicone grades meet French railway standard NFF 16-101, which is stricter than the German fire safety standard for rail vehicles (DIN 5510), with every member of the series being placed in the highest category. Moreover, studies carried out at WACKER in accordance with American standard UL 94 showed that these new grades qualify for V-0 classification. Thus, they are also suitable for applications outside the transport sector.

Processing Options

The ELASTOSIL® R 770 solid rubber grades can be colored with pigment pastes; their intrinsic white color allows pastel tones to be created. The peroxide-cure materials can be extruded, calendered, and compression molded on most standard equipment.

They are available in the form of solid rubber grades that cure to elastomers with a Shore A hardness of 50, 60 or 75. The 50-Shore A grade has a limiting oxygen index (LOI) of 30% and boasts good mechanical properties. Especially the two harder grades are

characterized by a very high LOI (greater than 35%) and therefore set a benchmark with respect to fire safety properties.

Visit WACKER at K 2010 in Düsseldorf. You'll find us in Hall 06, Booth A10.

The new ELASTOSIL® R 770 series of solid silicone rubber is among the new products to be presented at K 2010 by WACKER. ELASTOSIL® R 770 rubber grades can be used wherever fire safety is an issue, such as in rail vehicles and aircraft. (Photo: Wacker Chemie AG)

Note:

This photo is available for download at:
http://www.wacker.com/pressreleases

For further information, please contact:
Wacker Chemie AG
Media Relations & Information
Florian Degenhart
Tel. +49 89 6279-1601
Fax +49 89 6279-2877
florian.degenhart@wacker.com

The company in brief:
WACKER is a globally-active chemical company with some 15,600 employees and annual sales of around €3.7 billion (2009).
WACKER has 26 production sites and over 100 sales offices worldwide.

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

WACKER POLYMERS
Polyvinyl acetate and vinyl acetate copolymers in the form of dispersible polymer powders, dispersions and solid resins used as binders for construction chemicals, coatings, adhesives, paints, plasters and nonwovens

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 photovoltaics industries

Siltronic
Hyperpure silicon wafers and monocrystals for semiconductor devices