

PRESS RELEASE

Number 34

K 2010

WACKER Unveils UV-Activated Silicone Adhesive for Wound Dressings

Munich, June 14, 2010 – At the 18th International Trade Fair for Plastics and Rubber (K 2010), WACKER, the Munich-based chemical company, will present the first UV-activated, biocompatible silicone adhesive for wound care. Known as SILPURAN® 2149 UV, this product cures to a soft elastic, adhesive material. Curing is initiated by brief irradiation with ultraviolet light and proceeds very quickly at room temperature. The new silicone adhesive makes for faster and cheaper production of a-traumatic wound dressings and dressings for scar treatment. K 2010 will take place from October 27 to November 3 in Düsseldorf, Germany.

SILPURAN® 2149 UV is a pourable, two-component, addition-curing system containing a UV-sensitive catalyst. Irradiation with ultraviolet (UV) light converts this catalyst into its active form, whereupon the crosslinking reaction starts. This is where the new adhesive differs from conventional addition-curing silicone products that utilize heat-activated catalysts. The new silicone adhesive allows the curing time to be individually set via the UV radiation dose and the process temperature.

Processors benefit from the new curing technology in a number of ways. As the crosslinking reaction only starts when the

uncrosslinked material is irradiated with UV light, SILPURAN® 2149 UV has a large processing window despite its high reactivity. At the same time, processors can cure their products faster and shorten their process times. Since the silicone does not have to be oven cured, even thermally sensitive substrates can be coated with the new adhesive coating. Considerable energy cost savings can also be made.

In particular, the UV-activated silicone adhesive is ideally suited for the manufacture of wound dressings. It forms a thin layer between the multi-layer composite and the skin. The silicone helps to create a moist environment that is beneficial for the wound-healing process. Wound dressings with a silicone coating show excellent adhesion to the skin. The adhesion is so soft that removing or changing the dressing is possible without impairing the skin. There is also no risk of glueing or conjoining of the moist wound. The dressing can be removed and changed painlessly, i.e. a-traumatically, without re-opening the healing wound.

SILPURAN® – Silicone Products for Medical Applications

WACKER takes special precautions to ensure that the SILPURAN® line of silicone products meets the high standards and demands of the medical industry, both now and in the future. For instance, all SILPURAN® solid silicone rubber grades are visually inspected and packaged in antistatic materials in a cleanroom. Similar precautions are taken for other SILPURAN® products, such as liquid and room-temperature-curing silicone rubber grades, to ensure high safety standards for processors.

SILPURAN® silicones do not contain organic plasticizers. They also withstand radiation and are easy to sterilize. All products in this range are certified according to selected tests of ISO 10993-1 and USP (United States Pharmacopoeia) Class VI standards for biocompatibility. Regarding ISO 10993-1 tests, the material has been tested for cytotoxicity and sensitization properties, while USP Class VI examines acute systemic toxicity, intracutaneous toxicity, and short-term implantation.

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



At K 2010, WACKER will be unveiling the first UV-activated, biocompatible silicone adhesive for the manufacture of wound dressings and dressings for scar treatment. SILPURAN® 2149 UV cures rapidly at room temperature after brief UV irradiation. (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