

# PRESS RELEASE

Number 6

## Conserving Resources: WACKER Uses Biomethanol in the Manufacture of Silicone-Based Textile Softeners

**Munich, February 2, 2022 – The Munich-based chemical Group WACKER is now applying its resource-efficient silicones production concept to the manufacture of textile softeners. With immediate effect, three functional silicone fluids are available as “eco” products: WETSOFT® eco LV 810, WACKER® FINISH eco WR 1100 LV and WACKER® FINISH eco WR 1300 LV. Instead of fossil methanol, WACKER uses plant-based methanol for the manufacture of these products. The method, which is based on the biomass balance method used in production, has now been certified by TÜV Nord according to the REDcert<sup>2</sup> standard.**

Functional silicone fluids have a decades-long successful track record as softeners in the treatment of fibers, yarns or textile fabrics. They anchor to the fiber surface, forming silicone segment loops, which reduce the friction between the fibers, making textiles feel soft and fluffy. This also improves their care, wearing and processing properties.

The most important starting materials for silicone manufacture, and therefore for manufacturing textile softeners, are silicon and methanol. Methanol is first converted to methyl chloride, and then

reacted with elemental silicon in the Müller-Rochow process to form a mixture of different methylchlorosilanes, which are important starting materials for silicone production. In this process, WACKER uses both petrochemical and plant-based methanol. The ratio in the methanol mix can be exactly calculated for each product by means of the biomass balance.

WACKER now also uses this approach for its silicone textile softeners WETSOFT® eco 810 LV, WACKER® FINISH eco WR 1100 LV and WACKER® FINISH eco WR 1300 LV. The methanol required for production – exclusively certified biomethanol from straw, grass cuttings or other plant residues – is determined using a biomass balance method. The organic raw materials used for functionalizing the silicone polymers, such as polyether, are also offset with corresponding amounts as specified in the REDcert² standard. This ensures that all of the silicone fluids in the eco portfolio are based entirely on methanol derived from renewable plant sources. The method and the raw materials used are checked each year as part of an external recertification.

Eco and fossil-based products differ only in the way that the methanol component is manufactured. The structure and product properties are otherwise identical. For formulation of the ready-to-use textile auxiliaries, eco products are emulsified in water and mixed with other active substances, just like standard grades. They can be applied by the padder or exhaust process as usual.

► **WETSOFT® eco 810 LV** is a self-dispersing polyether-amino-functional silicone fluid with reduced volatiles content. The fluid

provides textiles with the soft hand that is typical of silicones, without affecting their absorbency. WETSOFT® eco 810 LV is therefore particularly well suited for treating towels, underwear and T-shirts.

► **WACKER® FINISH eco WR 1100 LV and WACKER® FINISH eco WR 1300 LV** are made of polydimethylsiloxanes with amino side groups and reactive chain ends. In addition to their outstanding effect as softeners, they also offer a certain amount of protection against moisture and stains – a major advantage for pants, shirts or table linen. WACKER® FINISH eco WR 1100 LV is particularly well suited for treatment of synthetic or mixed fabrics. WACKER® FINISH eco WR 1300 LV is ideal for viscose or for natural fibers such as cotton or wool.



With WETSOFT® eco 810 LV, WACKER is premiering an eco version of the tried-and-tested textile softener. The product is based on biomethanol, which ensures resource-efficient production. WETSOFT®eco 810 LV is particularly suitable for treating absorbent textiles. (Photo: WACKER)






Functional silicone fluids from WACKER have a successful decades-long track record as textile softeners. With WETSOFT®eco 810 LV, WACKER® FINISH eco WR 1100 LV and WACKER® FINISH eco WR 1300 LV the company is launching products manufactured with methanol from renewable raw materials produced in a resource-efficient way. (Photo: Wacker Chemie AG)

Note:

These photos are 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  
[florian.degenhart@wacker.com](mailto:florian.degenhart@wacker.com)  
[www.wacker.com](http://www.wacker.com)  
follow us on:   

**The Company in Brief:**

WACKER is a global chemical company with some 14,300 employees and annual sales of around €4.69 billion (2020). WACKER has a global network of 26 production sites, 23 technical competence centers and 52 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