

Cordenka Cellulose fibres – Properties and Opportunities in Plastic Reinforcements

Cordenka Rayon is a man-made cellulose fibre. Since the 1930s this material has proven that its unique properties can be utilized perfectly in the reinforcement of elastomers. Today, this continuous multifilament yarn guarantees the integrity of carcasses in high-performance tires. Rayon dominates this demanding market segment due to its balanced ratio between elasticity and tenacity. The elongation of break is approx. 13 %. This is higher than those of fibres generally used in composites, e.g. glass fibre, aramide or carbon fibre. Rayon is able to absorb a great amount of energy. Investigations showed that the impact strength of PP-rayon compounds significantly exceeds the impact strength of PP-LGF. Furthermore, Cordenka Rayon is a biodegradable fibre on a renewable basis, which convinces with its consistent properties.

Applications in composites may be those where sustainability or biodegradability, low density, high impact strength even at low temperatures and high quality consistency are required.