



ARBOCEL®
for plastics
and elastomers

PLANT FIBERS FOR AUTOMOTIVES

Plant-based materials contribute to sustainability in various parts of modern vehicles

Advantages of ARBOCEL® in Thermoplastics and Thermosets



Natural
appearance



Reduce fossil



Lightweight
filler



Increase
mechanical
properties



Improve
dimension
stability

Cellulose in Thermoplastics & Thermosets – Car interior.

In everyday life, fossil-based plastics will continue to play an important role in many applications. The incorporation of bio-based fillers is a first step towards efficient sustainability along the road towards bio-based feedstocks.



Product Use

Case 1: Interior door trim



Resin: PP
Filler: **ARBOCEL® FD-600-30**
Weight percent: 15 - 20 %
Processing method: Injection

Case 2: B-column cover & trunk board



Resin: PP
Filler: **ARBOCEL® C-320 or BW-40**
Weight percent: 20 - 30 %
Processing method: Injection

Advantages of Cellulose in Elastomers



Improved friction –
V-belts



Reduced noise –
V-belts



Reinforced cord layer –
Tooth belts



Reinforced walls –
Hoses



Reinforced
Gaskets

Cellulose in Elastomers – Transmission belts | Hoses | Gaskets

Natural-based fibers and particles are used since decades in different rubber applications. Short cellulose fibers and particles enhance transmission belts due to friction as well as noise reduction and stabilize the essential cord layer during production.

Product Use

Case 1: Transmission belts



Resin: EPDM
Filler: **ARBOCEL®
FD-600-30**
Parts: 30 - 50 phr
Processing method: Calander

Case 2: Gaskets



Resin: EPDM, NBR, SBR
Filler: **ARBOCEL®
FIF-400**
Parts: 12 - 25 phr
Processing method: Calander

Product Selection

Application	µm	
Native cellulose (hard wood)		
BE-600-10-TG	18	Transmission belts
BE-600-30	30	Transmission belts
B-600	60	Hoses interior plastics
BWW-40	200	Hoses
B-400	900	Gaskets
Native cellulose (soft wood)		
FIF-400	2000	Transmission belts
Native cellulose (cotton)		
BSCH-750-D	650	Transmission belts
Off-white cellulose / technical grades		
FD-600-30	45	Interior plastics
FD-00	150	Transmission belts
FD-40	250	Hoses
Grey cellulose fibers / technical grades		
ZZ-8-1-G	1000	Gaskets
Wood fibers (soft wood)		
C-750-FP	70	Interior plastics
C-100	100	Interior plastics
C-320	300	Interior plastics

Disclaimer

The above mentioned information is based on our practical knowledge and experience and is meant to be helpful when using our products. Due to the different materials and processes involved, we recommend in any case, adequate testing at your company or consultation with us. We cannot be held liable for this information. Please consider country-specific regulations.

WORLDWIDE HEADQUARTERS J. RETTENMAIER & SÖHNE GMBH + CO KG

BU Chemistry
73494 Rosenberg (Germany)
Phone: +49 7967 152-906
chemistry@jrs.de
www.jrs.eu