



KURALON™

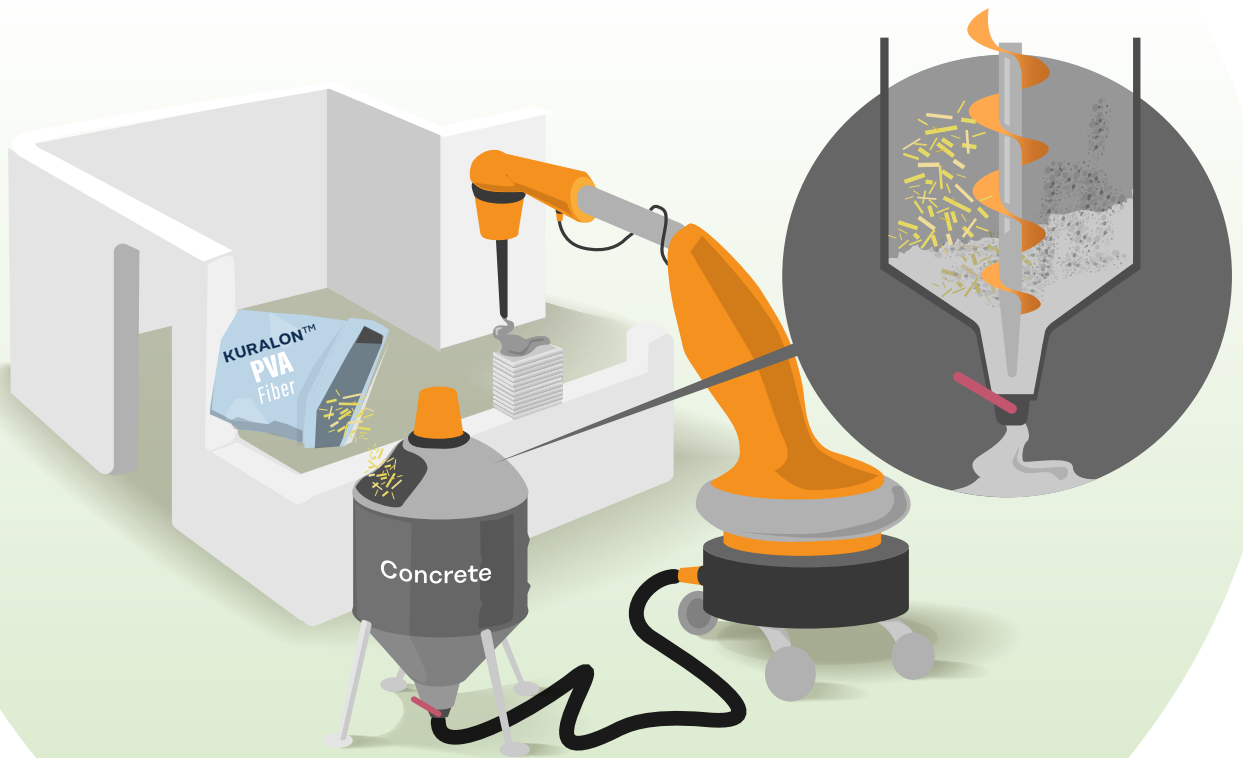
You know that advancements in 3D printing set new standards for the construction industry. **Innovative design, accelerated delivery and less production waste** are only some advantages of this new technology.

At Kuraray we are committed to developing pioneering products that add value even when you think innovation has reached its peak. **KURALON™** is a fiber spun from Polyvinyl Alcohol (PVA) and is the ideal reinforcing material for engineered cementitious composites (ECC).

While 3D constructions printed with conventional concrete run the risk of cracking and breaking under load, **ECC reinforced with KURALON™ absorbs significantly higher amounts of energy allowing for durable and low maintenance structures.**

Discover the new in the new.

KURALON™ PVA fiber for 3D Concrete Printing



Discover the unique opportunities that **KURALON™** offers for 3D concrete printing.

What is KURALON™ Polyvinyl Alcohol (PVA) Fiber?



KURALON™ is a fiber spun from Polyvinyl Alcohol (PVA). As early as 1950, Kuraray started its commercial production of **KURALON™**, which was the first synthetic fiber invented in Japan. Starting as an ideal substitute for asbestos, **KURALON™** looks back at a long history of success in the cement composite market. Since then, we have been striving to develop innovations for our customers, to inspire them and help them differentiate from competition.

KURALON™ offers a unique combination of properties making it most suitable for concrete and mortar reinforcement.

Benefits of KURALON™ for ECC:

KURALON™ outperforms steel fiber:

- Light weight
- Corrosion resistance

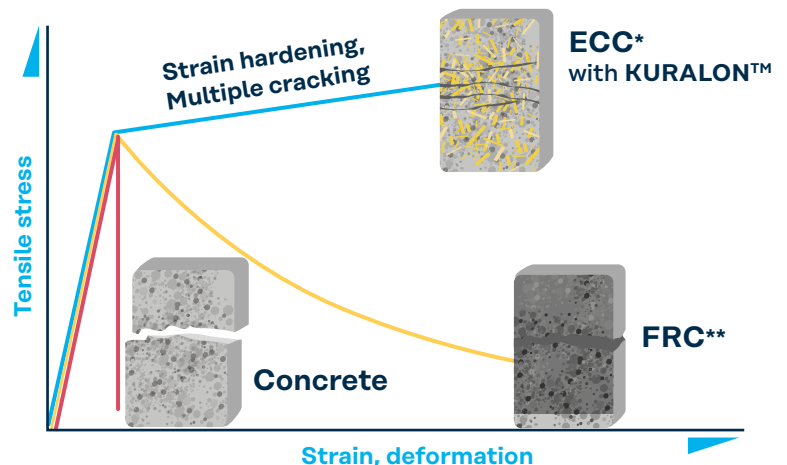
KURALON™ outperforms ARG fiber:

- Greater bending resistance
- Higher elongation

KURALON™ outperforms PP fiber:

- Greater tensile strength and modulus
- Better adhesion to cement matrix

Tensile stress-strain behavior of cementitious composites



*ECC = engineered cementitious composite

**FRC = fiber-reinforced concrete

Recommended KURALON™ for ECC:

Fiber	Diameter* [μm]	Length [mm]	Specific gravity	Dosage
KURALON™ RECS15	45	8	1,30	2 [Vol %] 26 [Kg/m ³]

*Diameter is the theoretical value when the cross section is assumed to be a perfect circle

Please contact us to find out more about the stress-strain test conditions and detailed results.

Kuraray Europe GmbH
 BU Industrial Fibers
 Philipp-Reis-Str. 4
 65795 Hattersheim / Germany

P +49 69 305 35 861

IndustrialFibers@kuraray.com
<http://kuralon-concrete.com/>

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