

## **Materializing ambitions**

Teijin Aramid partners with textile producers and garment manufacturers around the world to produce workwear that delivers safety, durability and unrivaled performance for workers in industries like refining, petrochemicals, utilities and more.

## Providing a sense of security

With our long history of expertise in flame resistant fibers, Teijin Aramid supports innovative fabric producers and apparel manufacturers to provide global solutions for industrial professionals in demanding workwear applications.

Garments constructed with Teijin's materials provide unrivaled resistance to heat, flame and chemicals coupled with superior durability compared to traditional garments in the same class. Our Twaron\*, Teijinconex\* and Teijinconex\* neo fibers are manufactured with inherent protection against heat, flame, and electric arc hazards in a wide range of conditions. This results in flame-resistant, self-extinguishing fibers that can be blended into lightweight fabrics for industries all over the world.

## **Key benefits of Teijin's aramids**

- Inherent heat and flame resistance
- Will not melt or drip
- Superior durability
- Vibrant colors to fit end-user needs
- Outstanding thermal stability at high temperatures
- Superior colorfastness



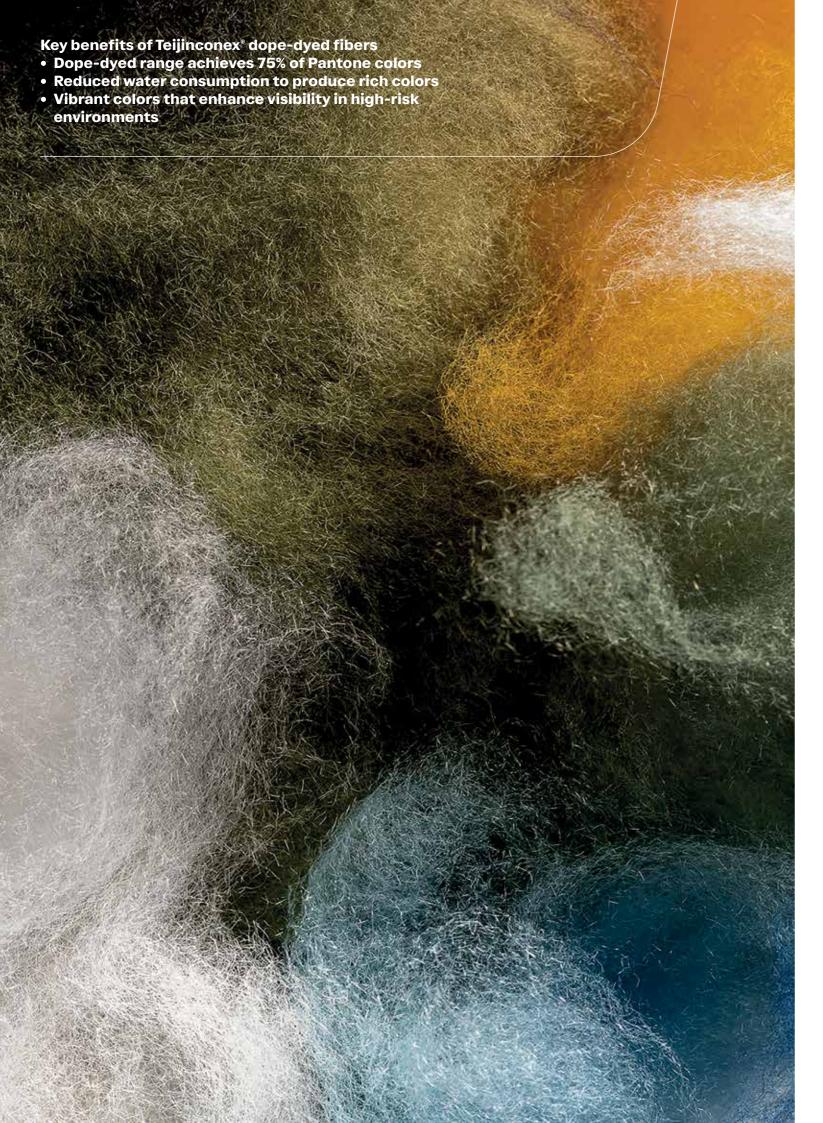
Workwear that never retires 5



# Protecting professionals

Teijin Aramid's family of fibers deliver the most advanced protection against heat, flames, electric arc, and mechanical hazards. Our fibers meet or exceed global industry standards for heat and thermal protective performance. The advanced thermal protective qualities of Twaron\*, Teijinconex\*, and Teijinconex\* neo are inherent in the fibers themselves. They don't wear or wash out, so their unique properties continue to perform even after repeated launderings, UV exposure, or wear and tear.

		Teijinconex° (meta-aramid)	Polyester	Cotton	Polyamide- imide	Modacrylic	Twaron <sup>®</sup>	Technora <sup>®</sup>
Tenacity	cN/ dtex	3.7 - 6.18	4.9	3.8	4 - 4.4	2.5	19-25	23-25
Elongation at break	%	28 - 45	35	8	18 - 19	25	2.3 - 4.2	3.9 -4 .5
Density	g/cm³	1.38	1.4	1.5	1.3		1.44 - 1.45	1.39
Moisture	%	5.25	0.45	7	~ 4	0.8	2-7	1.9
Decomposition or melting temperature	ōС	>400	258	145	>400		500	500



## Flexible portfolio for lightweight solutions

Twaron®, Teijinconex® and Teijinconex® neo provide exceptional protection from on-the-job injuries associated with arc flash, flash fire, and other thermal exposures. Protective apparel made using these remarkable fibers are lightweight, strong and can be worn for extended periods of time during demanding physical activity. Garments containing Teijin Aramid fibers deliver maximum protection and superior durability when compared to traditional garments in the same class.

## **Increased durability**

Blending Teijinconex® and Teijinconex neo® meta-aramids with Twaron® para-aramid creates distinct advantages over fabrics made from conventional fibers like cotton and polyester. Garments remain serviceworthy for longer and provide better value over time.

## **Coloring possibilities**

Visibility is crucial for brand identity, as is the need for all team members to look uniform and professional, regardless of how long they've been with the company. With Teijin Aramid's new dope-dyed fibers, manufacturers can create protective clothing that ensures brand consistency without compromising on safety

Our dope-dyed Teijinconex® guarantees excellent color retention, and the dyeable Teijinconex® neo presents a wide range of color possibilities and combinations.

All Teijinconex® fiber types are well suited for the industrial laundering process, maintaining the original color for longer. Both options of Teijinconex® fibers available result in uniform corporate colors that ensure all garments are consistent in shade, no matter how old.

Teijin Aramid's renowned fibers are among the most trusted names in personal protection.

**Disclaimer:** this data reflects our best knowledge at the time of publication. The content is subject to change as a result of new developments. It only contains a selection of the properties of the product(s) and is meant for commercial use only. Teijin Aramid gives no warranties and does not accept any liability regarding (i) the fitness of the products for any particular use, (ii) the correctness, completeness and usage of the information, (iii) the usage of the products (iv) or any infringement of any (intellectual or industrial) property of a third party. All intellectual property rights regarding this publication are the property of – or are licensed to – Teijin Aramid. Without our prior written consent, the reproduction and publishing of (parts of ) this publication is prohibited.

