

Armoring you for safety and comfort



# Meet the New Generation Modacrylic Fibers: armora

Modacrylic fibers possess unique inherent flame-resistant (FR) properties due to their molecular structure, ensuring that fabrics made from these fibers retain their FR capabilities for a lifetime.

Our state-of-the-art modacrylic fiber, Armora, delivers unmatched protection for industries where safety is essential. Engineered for durability without compromising comfort, Armora is the preferred choice for industry professionals seeking protective clothing with exceptional resistance to flames and harsh chemicals.

Its versatility allows for the development of innovative fabric solutions by blending self-extinguishing FR fibers, with the flexibility to incorporate non-FR fibers when required. This adaptability makes Armora an ideal solution across various high-risk sectors, ensuring superior safety and performance.



Adds flame retardancy to fabrics when combined with non-FR cellulosic fibers



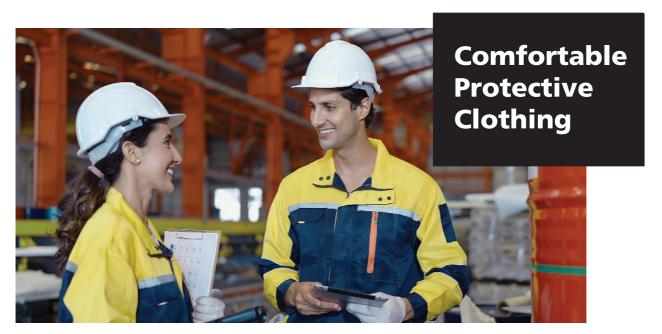
UV protection higher than other FR fibers



Solution dyeing technology



Comfortable and cost effective protection



## **Solution Dyed Modacrylic Fiber**

#### **Long Lasting Colors**

Thanks to AKSA's extensive expertise in solution dyeing, Armora fibers provide exceptional, long-lasting durability. The colors remain vibrant even after numerous industrial washes at high temperatures, making them the perfect choice for industrial laundry programs. After 100 cycles of industrial washing, the solution-dyed modacrylic fibers retain their superior durability, further reinforcing our commitment to sustainability.





#### **Lower Environmental Impact**

Solution dyeing is an innovative and eco-friendly dyeing method that significantly reduces the environmental impact of traditional dyeing processes. Compared to conventional vessel dyeing, this technology uses up to 70% less water and 15% less steam\*, making it a much more sustainable option.

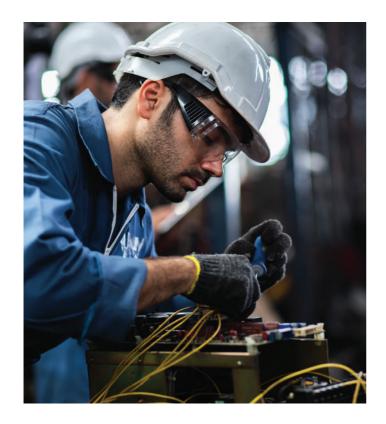
\*Indexed values are measured and calculated during fiber production.



## **High Visibility Solutions**

Armora's HiVis Yellow is fully compliant with ISO 20471 and ANSI 107 standards, making it the ideal solution for meeting the stringent requirements of modern applications. With Armora HiVis Yellow, a single dyeing process is sufficient to achieve high-visibility in modacrylic/cellulosic fabrics, ensuring efficiency and consistency.





### **Arc Protection**

Arc protection is a critical focus in the industries such as utilities, electrical maintenance, oil and gas, and manufacturing, where workers are exposed to arc flash hazards and Armora is at the forefront with its innovative solutions. By leveraging advanced fiber technology and optimized fabric construction, Armora enables exceptional arc rating performance, delivering reliable protection in high-risk environments.

#### **Oeko - Tex Certificate**

The environment and well-being of humanity are our primary focus, leading us to produce all Armora products to meet the Class I requirements of Oeko-Tex Standard 100.





## **Ormord Fibers Technical Properties**

	Limiting Oxygen Index (LOI) (%)	Fiber Count (dtex)	<b>Tenacity</b> (cN/tex)	Elongation (%)	Fiber Length (mm)	Colour
Armora AT400	28	1,70	32-42	35-45	According to customer request	Ecru, hi-vis colored, solution dyed, tow dyed
		2,20	-			
		3,30	27-37			
Armora AT417	32	1,70		37-47		
		2,20	31-41			
		3,30				
Armora AT415	33	1,70	31-41	37-47		
		2,20	31-41			
		3,30	27-37			
Armora AT414	34	1,70	28-38	37-47		
		2,20	-			
		3,30	-			

Each fabric's flame resistance is determined by, but not limited to, the fiber blend, fiber processes, yarn structure, and construction of the fabric. Although Armora is an inherently flame-resistant modacrylic fiber with an LOI >28, compliance to relevant standards should be examined on a case-by-case basis by the end-user. The information contained within this document is for guidance only and solely based on the past experiences, research, and analyses of Aksa Akrilik Kimya Sanayii A.Ş.









ISO 11611

ISO 11612

IEC 61482-1-2

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