

TECHNICAL TUESDAYS

TOPIC: Trouble Shooting for Water & Oil Repellent Finishes.

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What is water & Oil Repellent Finish?

The Finish which is applied on the Textile to make the fabric to repel from Oil & water is called water & oil repellent finishes, Usually Achieved by Using Fluorocarbons.

Trouble Shooting for Water & oil Repellent Finishes:

Conditions for high repellency of finished fabrics include a close-packed textile structure with

- A. small inter-yarn spaces (therefore better woven than knitted)
- B. With fine yarns (preferably microfibers or microfilaments)
- C. And a uniform distribution of the repellent finish.

The Fabric surface should free from protruding fibers we can remove by singeing or shearing before proceeding the Finishing.

The fabric should free from residual sizing agents or surfactants it will affect the repellency properties

Non-rewetting, thermally degradable or volatile surfactants such as isopropanol should be used in the repellent finish bath to maximize the Repellent properties.

However, most silicone products interfere with the oil repellency of fluorocarbon finishes and should be strictly avoided in an oil repellent Recipe formulation.

Other common finish combinations include Flame Retardant and antimicrobial generate valuable and useful multifunctional finishes.

Wishing you a happy week ahead!

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arc@resil.com | www.resil.com