

ENVIRONMENT FRIENDLY WATER REPELLENT AND SOIL RELEASE FINISH WITH FLUORINE-FREE SOLUTIONS

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ABSTRACT

In modern world customer demands more value on garments through different levels of comfort, durability and functionality. These expectations have led to major opportunities for the textile industry in general and textile finishing in particular. Water /oil repellent finishes can provide durable liquid repellency (Water and Oil) without compromising the natural feel of cotton. With proper chemical treatments, judicious selection of specialty chemicals, fabric construction, fabric/ garments, a host of benefits to the wearer such as staying clean for a longer period, faster drying and protection from rain can be produced. Water repellent property of fabric was analyzed through AATCC method. In this research we used non-fluorocarbon-based chemical which is sourced from some variety of plant-based sources, selected to be from non-genetically-modified (non-GMO) and non-food-source feedstock. It also fully complies with Oeko-Tex Standard 100 requirements, and with the Zero Discharge of Hazardous Chemicals (ZDHC) Joint Roadmap Manufacturers Restricted Substance List (MRSL). In this thesis after the treatment of water, oil repellency and staining property and the test procedures are described with the laboratory testing result on knit fabric. In accordance with the design developed keeping in mind for the child who are generally engaged in water, oil and dust during playing on a regular basis.

KEYWORDS: Water Repellency, Treatment, Durability & Finishes

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