Technical Bulletin



ORCO REPEL™ FF

Highly effective fluorine free water repellent for all fiber types. It has excellent washing durability when combined with crosslinking boosters, such as ORCO CROSSLINKER™ NIR. ORCO REPEL™ FF imparts good resistance to aqueous soil, abrasion resistance and soft fabric hand.

PROPERTIES

Form White emulsion

Ionic nature Cationic

Specific gravity 8.3 lbs/gal (68 °F)

3.5 - 5.5Hq

Water solubility Easily dilutable with cold water

APPLICATION

ORCO REPEL™ FF is used to impart water repellency to textile substrate of all fiber types. For good durability use of a ORCO CROSSLINKER™ NIR is required. The pH of the application liquor should be adjusted with acetic acid (pH 4-5) before adding ORCO REPEL™ FF through a finely meshed sieve or filter.

ORCO REPEL™ FF can be easily dispersed in water by stirring. The use of high speed impellers or stirrers should not be used as the emulsion can be damaged irreversibly due to high shear.

The goods must be thoroughly pre-treated and should be free from surfactants, fiber finish oils, dyeing assists, lubricants, residual alkali or multivalent salts, as small quantities may cause deterioration of the water repellency effect.

Polyester and Polyamide

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ORCO REPEL™ FF	50 – 125 g/L	70 – 125 g/L
ORCO CROSSLINKER™ NIR	10 – 20 g/L	20 – 25 g/L
Wet pickup	30-60%	60-80%
Drying	320 °F for 1 min	320 °F for 1 min
Curing	340 °F for 2-3 min	340 °F for 2-3 min

For heavy or poorly drying substrates, the dwell time must be extended. Lower curing temperatures with increased dwell time (e.g. 280 °F for 5 min) can be used depending upon the desired water repellency effect along with a suitable cross linker such as ORCO CROSSLINKER™ CUR, preliminary trials should always be conducted.

To restore the full effect of the finish after each wash, a heat treatment (tumble drying or ironing) is necessary.

Storage

The product is sensitive to frost and heat and must not be stored at temperatures below 40 °F or above 100° F. Irreparable damage is possible. In the case of suspected frost or heat damage, the usability of the product has to be checked before processing.

Information contained in this technical data sheet is up-to-date and correct to the best of our knowledge at the date of issue and are subject to change. As Organic Dyes and Pigments LLC cannot control or anticipate the conditions under which this product may be used, each user should review the information in specific context of the planned use. Organic Dyes and Pigments LLC will not be responsible for damages of any nature resulting from the use or reliance upon the information contained in this data sheet. No express or implied warranties are given.

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ISO 9001 Certified

Cotton and Polyester/Cotton