

## Description

**RUCO®-DRY ECO FPT** is a high performance water repellent textile finishing agent made from non-fluorinated and non-persistent materials. **RUCO®-DRY ECO FPT** has been specifically designed for flame retardant fibres such as Trevira® CS providing superior water repellent performance to technical fibre applications with no to only minimal impairment of the flame retardant properties. Textiles finished with **RUCO®-DRY ECO FPT** can be branded **BIONIC-FINISH® ECO**.

## Performance highlights

- superior water repellency on natural fibres, synthetics and blends providing long-lasting protection from rain and aqueous stains
- excellent durability to home laundering allowing 20x washes and more
- no to only minimal impairment of flame retardant properties
- best-in-class laundry air dry (LAD) properties on synthetic fibre substrates
- breathability of fabrics is retained thus providing comfortable wear of finished articles
- outstanding abrasion resistance making the water repellent finish suitable for most challenging technical applications
- high stability and processability of finished goods including excellent lamination properties for post-processing of finished fabrics
- compatible with commonly used wetting agents, fillers and extenders
- free of halogenated compounds and alkylphenol ethoxylates (APEO)

## Product characteristics

Ionic character: cationic/ non-ionic

Appearance: off-white aqueous emulsion

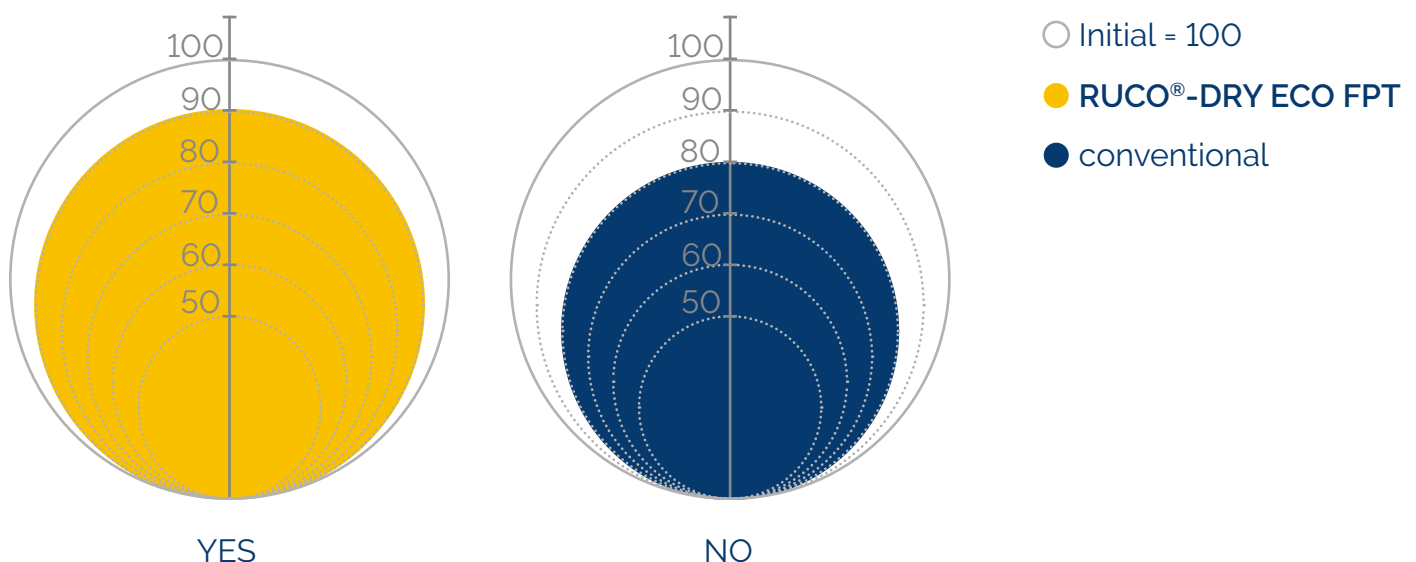
Technology: dendrimers

pH: 3.5 - 6.5

Density: 1.0 g/L

## Performance overview

Initial water repellency (AATCC22) on Trevira® CS and compliance with fire classification B2 EN 4102-1

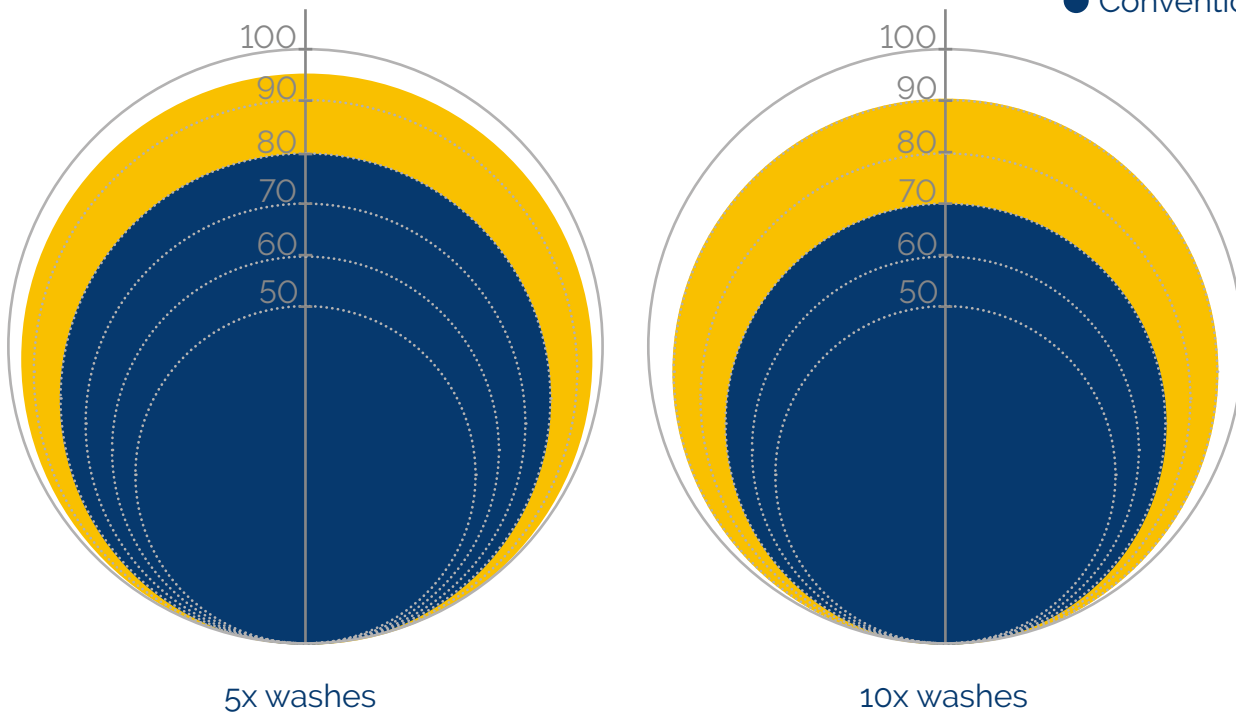


Water spray repellency (AATCC22) on polyester after home laundering at 40°C (ISO6330) and line drying (20°C)

○ Initial = 100

● RUCO®-DRY ECO FPT

● Conventional



## Guideline application and recipe

### Application steps for padding

- prepare and acidify the finishing bath to pH 3.5 - 5.5 using e.g. acetic acid
- add auxiliaries such as crosslinking agents, wetting agents and fillers if required
- add **RUCO®-DRY ECO FPT**
- adjust wet-pick up of fabric to 40 - 80 %
- dry at 120 °C and cure at 160 °C (60 sec)

### Example recipes

Demonstrated examples include RUDOLF GROUP auxiliaries such as wetting agents (**RUCOWET®**) and blocked crosslinking agents (**RUCO®-LINK**).

### Flame retardant synthetics e.g. Trevira® CS

- 2 g/L Acetic acid 60 %
- 30 - 80 g/L **RUCO®-DRY ECO FPT**
- 10 g/L **RUCOWET® FN**

### Synthetics

- 2 g/L Acetic acid 60 %
- 30 - 100 g/L **RUCO®-DRY ECO FPT**
- 4 - 12 g/L **RUCO®-LINK XHC**
- 10 g/L **RUCOWET® FN**

## Certifications

- GOTS approved
- ZDHC MRSL compliant
- Standard 100 by OEKO-TEX® (suitable for class I-IV)

Contact us

[www.rudolf-group.com](http://www.rudolf-group.com)