## **Technical Tuesday**

### Soil release finish-Part 3

#### FACTOR AFFECTING THE SOIL RELEASE FINISH

FACTORS	EXPLANATION
Nature of the soil	Oily soil or particulate soil, hydrophobic or hydrophilic, liquid or solil
Kind of fibres	Type of fibre, hydrophilic or hydrophobic, smooth or porous fibre surface
Nature of textile	Textile construction; yarn (staple or filament), fabric (knit, woven or nonwoven
Effects of dyeing and printing	Difference in binder films, residual hydrophobic dyeing auxiliaries
Effects of other finishes	Compatible with antistatic finishes, easy-care finishes and other finishes not harmed by a hydrophilic surface. Not compatible with conventional repellent finishes and other finishes where hydrophilicity is detrimental to finish performance
Washing conditions	Detergents, hydrodynamic flow in the washing machine

#### Mechanism of Soil release finish(DUAL ACTION):

- The flourocarbon polymers have the unusual property of being hydrophobic and oleophobic in air and hydrophilic and oil-releasing during the laundering process
- This is called as 'dual action' mechanism .
- The hydrophilic blocks are shielded by the fluorocarbon segments when dry, presenting a repellent surface
- After immersion in the wash bath, the hydrophilic blocks can swell and actually reverse the interfacial characteristics of the surface, yielding the hydrophilic



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surface necessary for easy oily soil release during washing.

- So the detergent used during washing can easily penetrate inside the fabric and enhance the soil release.
- Typically, these modified fluoropolymers are pad applied to fabricsfollowed by drying & curing

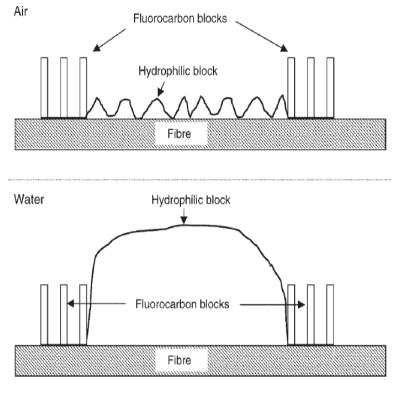


Fig Dual action

"Have a Happy Week a Head"

To be continued......



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