



## PROGUARD 400 S

**PROGUARD 400 S** is specially designed Water–Oil-Repellency auxiliary, which can be used in all kind of versatile fabrics. **PROGUARD 400 S** has an extra soft handle compared with competition products due to fluorocarbon resin selection. **PROGUARD 400 S** has much wider pH range for optimum efficiency hence can be used with natural synthetic combinations as well.

### CHARACTERISTICS:

Composition	: Fluorocarbon emulsion
Appearance	: White emulsion
pH	: $5,0 \pm 0,5$
Ionic char.	: Weak cationic
Solubility	: It can be diluted in cold water in any ratio

### USING CONDITIONS and APPLICATIONS:

**PROGUARD 400 S** has the following features:

Enables to obtain good hydrophobic character on any fabric

Does not create any handle loss

It can be used together with nearly all resin products in the same bath as well as silicone based auxiliaries.

In case of using in partially printed or white fabric **PROGUARD 400 S** enhances the wet and dry rubbing fastnesses,

Recommended usage may vary from fabric to desired effect but as a general approach the list below will give satisfactory results. **PROGUARD 400 S** has to be utilized in padding under acidic pH conditions at pH:  $5,0 \pm 0,5$  and WPU at 70-80 %

For PES fabrics	; 5,0 - 15,0 g/l,
For Wool fabrics	; 10,0 - 20,0 g/l,
For Nylon and derivatives	; 5,0 - 20,0 g/l,
In CO and CO/ Viscose fabrics	; 15,0 – 40,0 g/l,
In CO/ PES combinations	; 10,0 – 25,0 g/l

It is recommended that adding 1 g/l Isopropyl alcohol to application bath because of increasing watability.

### PERFORMANCE

Oil Repellant;	Tested by <b>AATCC-118 Standard.</b>
Water repellent;	Tested by <b>AATCC-22 Standard.</b>

#### A ) For Cotton Fabrics

Pick Up	: % 65
Drying	: 110 ° C, 120 Seconds
Curing	: 150 ° C, 180 Seconds

### Water and Oil Repellant value

PROGUARD 400 S		1,6 %	2,0 %	2,4 %	1,6 %	2,0 %	2,4 %
DMDHEU resin					7 %	7 %	7 %
Catalyst ( %12)					2 %	2 %	2 %
Water Repellant Value	Beginning	90-100	100	100	100	100	100
	HL-3*	50	50	50-70	50	50-70	70
	DC-3*	70	70	80	80	90	90
Oil Repellant Value	Beginning	4	6	6	6	6	6
	HL-3*	1	2	2	2	3	4
	DC-3*	4	5	5	4	5	5

### B ) POLYESTER / COTTON (65 / 35 )

Pick Up : % 55  
Drying : 110 ° C, 120 Seconds  
Curing : 150 ° C, 180 Seconds

### Water and Oil Repellant value

PROGUARD 400 S		1,6 %	2,0 %	2,4 %	1,6 %	2,0 %	2,4 %
DMDHEU resin					7 %	7 %	7 %
Catalyst ( %12)					2 %	2 %	2 %
Water Repellant Value	Beginning	100	100	100	100	100	100
	HL-3*	70	80	90	80	80-90	90-100
	DC-3*	80	90-100	90-100	80	90	90
Oil Repellant Value	Beginning	5	6	6-7	6-7	7	7
	HL-3*	1	2	3	3	4	5
	DC-3*	5	5	5-6	4	5	5

### STORAGE CONDITIONS:

Keep out of direct sunlight or freezing. It is stable for at least 6 months if stored in original packing and recommended storage conditions.

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