

## SUNWHITE PRN

SUNWHITE PRN is Optical Brightening Agent with brilliant neutral reddish shade for polyester and its Polyester blended fabrics. Especially, it is suitable to get the high brilliant whiteness

### **Special Properties**

- Suitable in exhaust dyeing and especially good at continuous dyeing.
- Good sublimation fastness.
- Good brilliant whiteness dyeing result.
- Good levelling result.
- Good compatibleness in resin finish process.
- Good reproducibility at medium temperature

### **General Properties**

APPEARANCE	Yellow liquid
CHEMICAL STRUCTURE	Styrylbenzene Derivative
IONIC CHARACTER	Nonionic
pH (1% solution)	Approx. 7 - 5
SPECIFIC GRAVITY	Approx. 1.0

### **Storage**

SUNWHITE PRN has good stability to long term storage. However, once opened, keep the product in a cool and dark place to avoid direct contacting with air and sunlight.

### **APPLICATION Disolving/Diluting**

**The product can be applied by exhaust process from eakly acid, neutral or alkaline baths, as well as in hydrogen eroxide bleach. SUNWHITE PRN can be applied continuously by the pad-bake process and by pad-steam systems, suitable for printing and bleaching Polyester. Suitable carriers promote bath exhaustion and particularly development of the OBA on the fibre. Preliminary trials are necessary, as cariers may impair the light fastness. The highest white effects are obtained under HT conditions ( 110 - 130°C )**

### **Disolving/Diluting**

**The product must be carefully stired before removal the container and is advisably diluted before use with about 10 times its weight of cold soft water or preferably with warm soft water at 40 - 50°C. To preserve its stability, the dispersion must not be boiled up. Stock solutions can be prepared , but must be stired before use. Stock solutions should be kept away from light, also substrates treated with the whitening agent as long as it is not fixed**

**Required Amount**

**SUNWHITE PRN**

PES		
EXHAUSTION	0.1 - 0.8	%
Pad-bake	2.0 - 10.0	g/l
Pad steam process		
Liquor ratio	40 - 90	%
PES/CEL		
Exhaustion	0.1 - 0.8	%
Pad-bake	2.0 - 10.0	g/l
Pad steam process		
Liquor ratio	40 - 90	%

**Suggested recipes – polyester**

**Exhaust process**

SUNWHITE PRN	0.1 - 0.9	%
MILENQUEST PS	0.5 - 2.0	g/l
pH	5 - 7	(with e.g. formic acid)
LIQUOR RATIO	10:1 - 20:1	
HEAD-UP TIME	20 - 30	Minutes
TEMPERATURE RANGE	110 - 130	°C
TREATMENT TIME	30	Minutes

The goods can be treated with suitable softening agents in the final rinsing bath.

**One Stage Brightening with Relaxing Process ( Desizing & Creeping )**

SUNWHITE PRN	0.1 - 0.8	%
MILENQUEST PS	1.0 - 2.0	g/l
MILENSCOUR LF	0.5 - 2.0	g/l
MILENLUBE C	1.0 - 2.0	g/l
pH	7 - 12	(Dependon Sizing Agent)**
TEMPERATURE RANGE	110 - 130	°C
TREATMENT TIME	30 - 60	Minutes
LIQUOR RATIO	10:1 - 20:1	

Over flow is advisable after treatment process to avoid sized precipitation

\*\* pH range of best sized removability

POLYACRYLATES		About 12
PES-POLYMERISATES	7.5 - 9.5	
POLYVINYL ALCOHOLS	7.0 - 8.0	

### **Pad-bake process**

SUNWHITE PRN	2.0 - 10.0	g/l
MILENQUEST PS	1.0 - 5.0	g/l
MILENWET SF-F	0.5 - 1.0	g/l
Padding Liquor pick up	40 - 80	%
Drying	100 - 120	°C
BAKING/DEVELOPING	60 - 45	Second at 160 - 180 °C

For specific end - use ( e.g. net curtains ), padding can be carried out in presence of suitable soft handle, anti static and non slip agent. A proper pre - washing process ensures minimal base white yellowing during baking. **Suggested recipes - polyester / cellulose** The polyester component should be optically brightened by the methods recommended for polyester. The cellulose component is usually whitened separately afterwards, e.g. in the peroxide bleach or more often in combination with finishing. Besides multi - stage method, one - stage processes are also used in which both fibers are optically brightened at the same time, e.g. during bleaching and finishing.

### **One stage brightening of polyester / cotton in peroxide bleach**

#### **Exhaust process**

SUNWHITE PRN	0.1 - 0.6	%
SUNWHITE CH-N Series	0.1 - 0.3	%
HYDROGEN PEROXIDE	2 - 8	ml/l
MILENSCOUR COM	1 - 3	g/l
COUSTIC SODA 100%	0.5 - 2	g/l
LIQUOR RATIO	10:1 - 20:1	
TEMPERATURE RANGE	105 - 120	°C
HEAT UP/TREATMENT TIME	30 - 40	/20 – 60 min

### **One stage finishing / brightening of polyester / cotton**

#### **Pad - bake process**

SUNWHITE PRN	2 - 8	g/l
SUNWHITE CL-N	3 - 12	g/l
KTM REZIN COMB (Precatalized)	20 - 60	g/l
MILENSOFT NY	20 - 40	g/l
MILENWET SF-F	1	g/l
ACETIC ACID 80%	0.5 - 1	g/l
Padding Liquor pick up	60 - 70	%
Drying		
CURING	15 - 45	Second at 170 - 190 °C

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