

ITOPROTECT UVBP is an UV cutting finishing agent suitable for application onto both natural and synthetic fibers.

## PROPERTIES

- **Appearance** : Straw to white coloured emulsion
- **Main Ingredient** : Benzophenone type
- **Ionic Character** : Anionic
- **Solubility** : Dispersible in cold water
- **pH** : 5 - 7

## APPLICATION

### In Padding:

- **ITOPROTECT UVBP** : 10 - 50 g/l
- **ITOBINDER AG\*** : 30-80g/l
- **Drying** : 100°C for 2 min
- **Curing** : 160°C for 2 min

### In Polyester Dyebath:

- **Add ITOPROTECT UVBP** : 2 - 5 %

\* To impart increased durability to washing

## CHARACTERISTICS

1. Remarkably effective at cutting UV rays (especially at the 250 - 400nm wavelength)
2. Does not effect handle
3. Applicable to cellulosic fabrics and their blends by pad application.
4. Applicable to polyester fabrics and their blends by either padding or can be included in the polyester dyebath.

## DISCLAIMER

The information herein offered is based on the best of our knowledge at present. However, we are not able to guarantee these matters, as the result of application may vary according to conditions adopted. Preliminary tests are, therefore, recommended in all cases. Please refer to MSDS regarding handling of the products.

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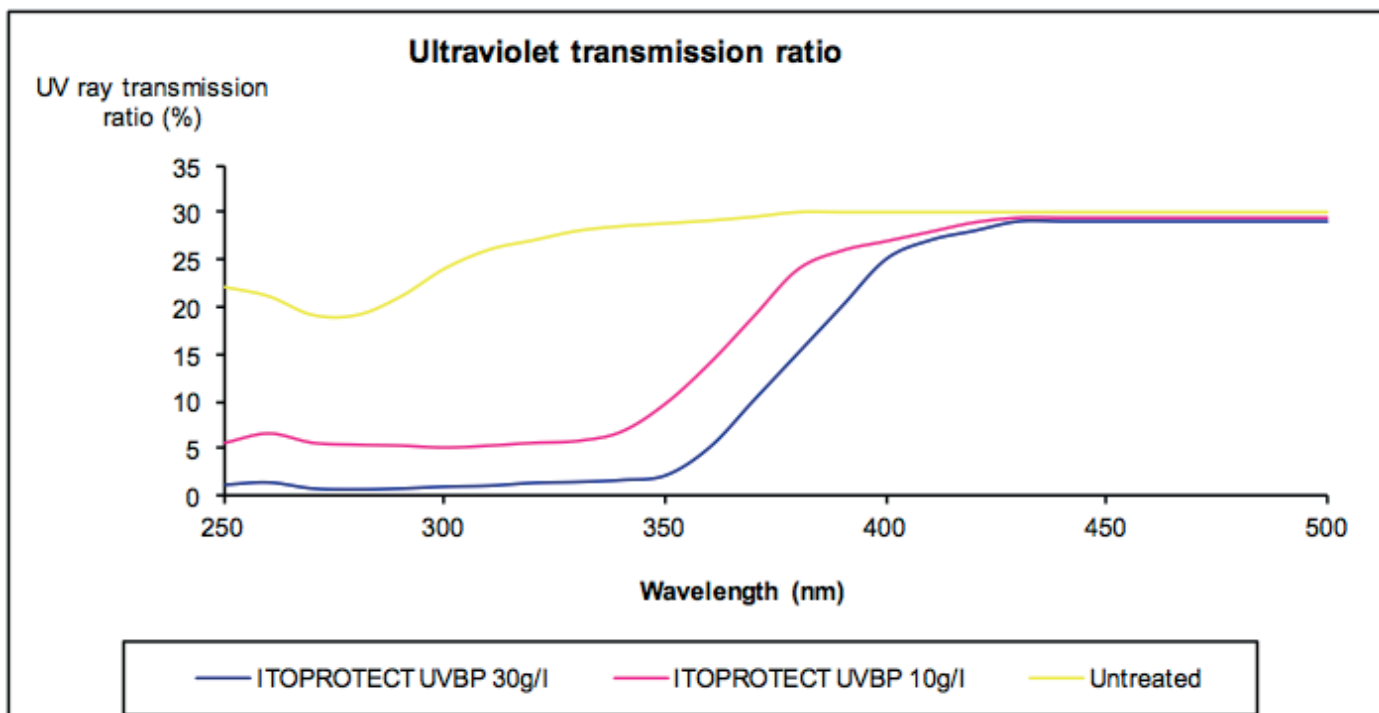
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## APPENDIX

### Test Data

- **Fabric** : Cotton Broad
- **Recipe** : ITOPROTECT UVBP @ 10g/l and 30g/l
- **Method** : Pad (80% pickup)
- **Dry** : 100°C x 2 min
- **Cure** : 160°C x 2 min



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## APPENDIX

### Example Application

- **Fabric** : 100% Cotton
- **Application** : Pad
- **Pickup** : 100%
- **Dry/Cure** : 160°C x 1 minute
- **Recipe** : 30g/l ITOPROTECT UVBP  
80g/l ITOBINDER AG
- **Washing** : 20 washes @ 40°C
- **Testing** : UV protection factor rating to EN13758-1 2001 + A1:2006

Sample	UPF Result*
Cotton Fabric	50+
*A full breakdown of results are shown below	

UVA %	s.d	UVB %	s.d	Measured UPF of Red sample				Mean UPF	s.d	Rated UPF
				Length 1	Length 2	Width 1	Width 2			
1.1	0.48	0.8	0.36	79.9	234.7	94.7	161.9	142.8	70.9	50+

Abbreviation	Definition
UVA	Arithmetic mean of the UVA transmittance (UVA average) in the range 315 nm to 400 nm
UVB	Arithmetic mean of the UVB transmittance (UVB average) in the range 290 nm to 315 nm
Measured UPF	The measured UPF of each individual specimen
Rated UPF	The rated UPF of the sample
s.d	Standard deviation

### Precautions

1. The characteristics of the chemical may cause optical brightening effect and/or colour change.
2. UV cutting effect may be lessened when applied to thick, highly dense fabrics.
3. Avoid direct sunlight and store in a cool dark place.
4. Refer to SDS for safe handling procedures.