



**StanoStat A20W**

**NIR Absorber Coating**  
**on PVC Film**  
**Optical Evaluation**



## Experimental Set Up:

Product: StanoStat A20W; Solids Content: 40,6%  
Binder: Witcobond 386-3; Solids Content: 39,8%

Process: High speed mixer (Speedmixer)  
Draw Downs: Bar #8  
Drying: 24 h at RT

% Solids	Dry film thickness (micron)
5	0.65
10	1.30
15	1.95
20	2.60
30	3.90



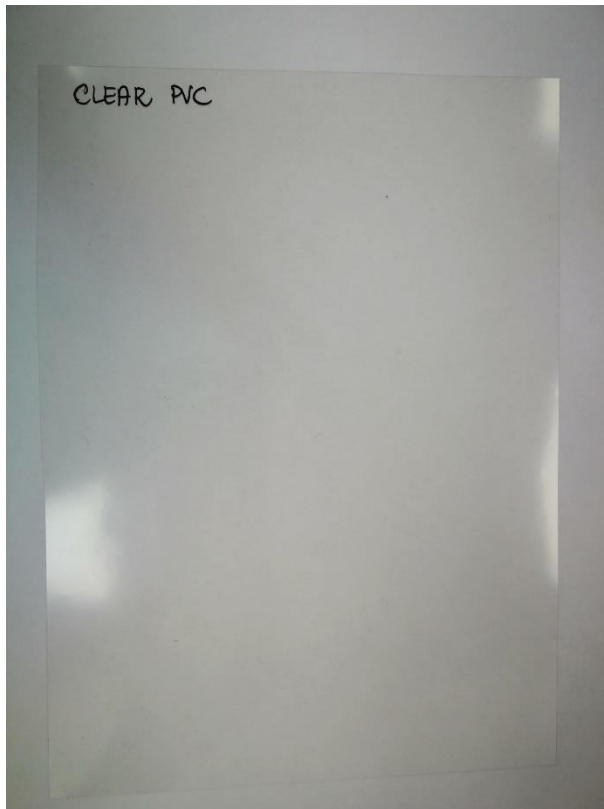
## Pigment Volume Concentration

% CPM10C (solids in formulation)	Mass of CPM10C dispersion (in formulation)	% CPM10C (solids per solids in WITCOBOND)
5	1.85	2.0
10	3.70	4.0
15	5.55	5.7
20	7.4	7.5
30	11.1	11.3



## Fotos of the Films:

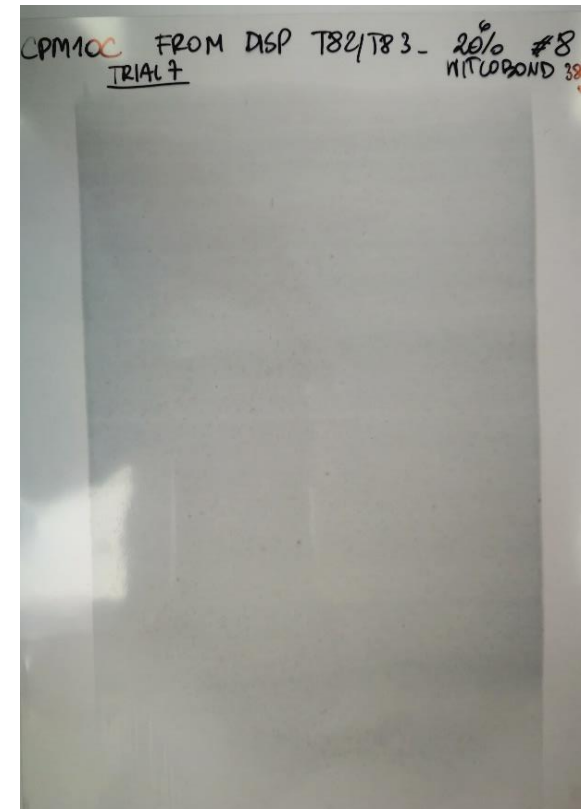
### Without Pigment



### with 10% Pigment



### with 20% Pigment



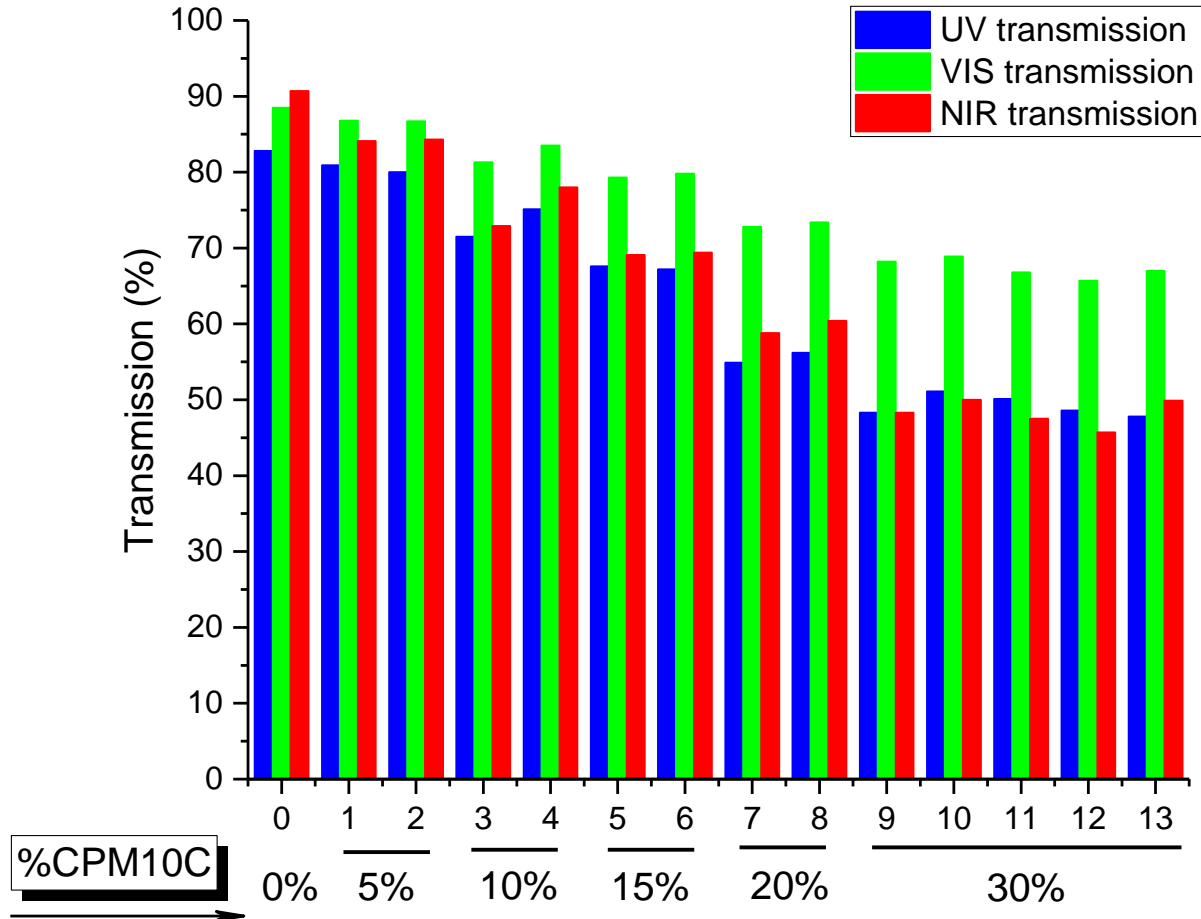


## Optical Evaluation of the coated Films

% CPM10C (solids in formulation)	Trial	Surface resistance	UV transmission	VIS transmission	NIR transmission
Clear PVC		$10^{12}$	82.8	88.5	90.7
PVC + WITCOBOND 386-03		$10^{12}$	84.3	89.4	91.5
5	1	$10^{12}$	80.9	86.78	84.1
	2	$10^{12}$	80.0	86.7	84.3
10	3	$10^{12}$	71.5	81.3	72.9
	4	$10^{12}$	75.1	83.5	78.0
15	5	$10^{11}$	67.6	79.3	69.1
	6	$10^{11}$	67.2	79.8	69.4
20	7	$10^8$	54.9	72.8	58.8
	8	$10^8$	56.2	73.4	60.4
30	9	$10^6$	48.3	68.2	48.3
	10	$10^6$	51.1	68.9	50.0
	11	$10^6$	50.1	66.8	47.5
	12	$10^6$	48.6	65.7	45.7
	13	$10^6$	67.0	47.8	49.9

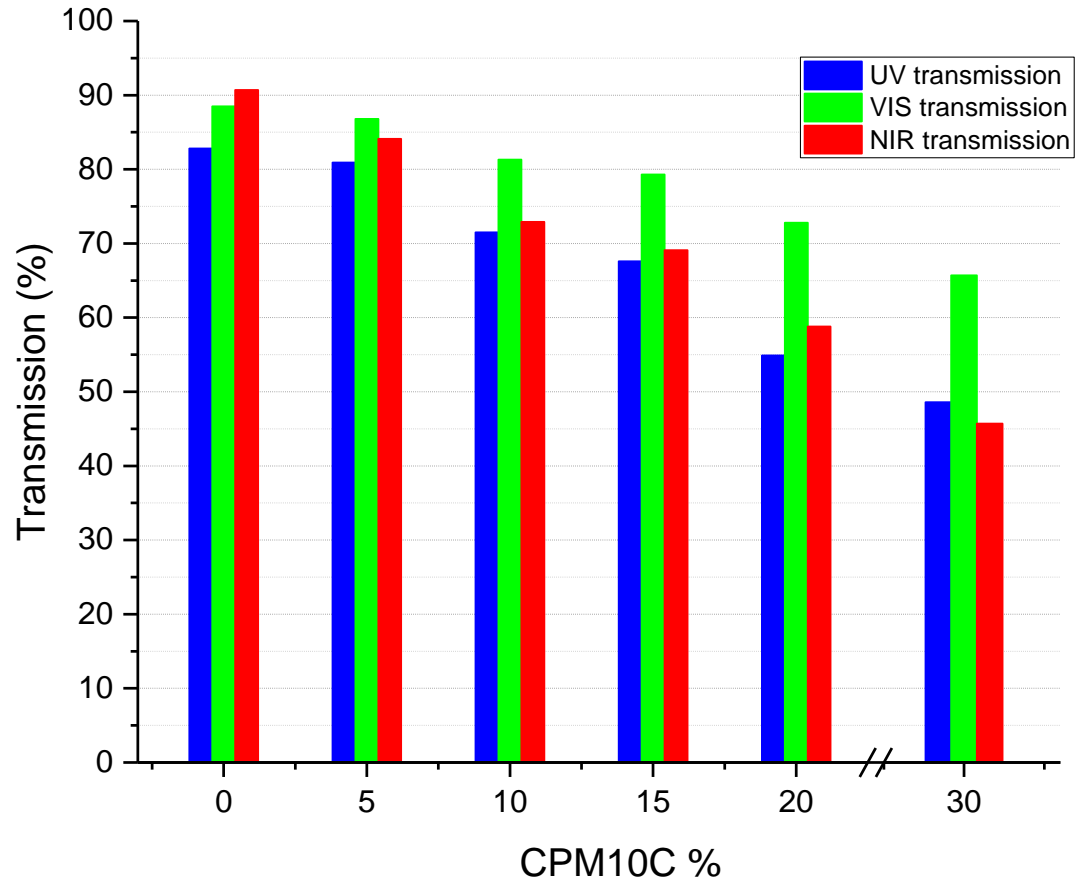


## Optical Evaluation of the coated Films





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