

Specifications for NuShield Antimicrobial (AM) Film

Property	Value	Test Method
Burst Strength	1.75 MPa	ASTM D774-67
Elastic Modulus	4-5.5 GPa	ASTM D882-83 23° C, 50% RH. Strain Rate-10% per minute
Gardner Haze	55 ± 5%	ASTM D1003-77
Total Luminous Transmission	92.0 ± 0.5	ASTM D1003-77
Dimensional Stability	0.2% max shrinkage	MD @ 120° C
Pencil Hardness	2H	ASTM D1044
Gloss Level @ 60°	7 ± 0.5% Gloss Units	ASTM D2457-70
Yellowness Index	<3	ASTM D1925-70
Chemical resistance	Resistant to: Alcohols Dilute acids Dilute alkalis Esters Hydrocarbons Ketones Household cleaning agents	DIN 42 115

Anti-Bacteria property (against Colon Bacillus)

Test Sample	Number of Survival after 24 hrs	Value of antibacterial activity
AS-CPF100*75)-SL(50)-ABV	<10	3.2
Number of Initial added bacteria	5.7 x 10 ⁵	

Anti-Bacteria Property (against Staphylococcus Aureus)

Test Sample	Number of Survival after 24 hrs	Value of antibacterial activity
AS-CPF100*75)-SL(50)-ABV	<10	4.5
Number of Initial added bacteria	6.8 x 10 ⁵	

(JIS-Z2801)

Bleach Test

Test procedure:

A small 4 x 4 cm piece of paper towel was saturated with Clorox bleach (6% sodium hypochlorite) and placed on the top surface of NuShield Triple A film. A glass cover was placed on top to minimize evaporation. A dwell time of 10 minutes was used. After the dwell time was complete, the glass cover and the saturated paper towel were removed. The film was then evaluated for damage to the coating. The surface of the film was wiped with a paper towel to remove the bleach solution. No increase in haze, coating integrity or other damage was detected.