



STARDUST COLORS

Special effect pigments for automotive custom paint, design and decoration

DATA-SHEET RETROREFLECTIVE SEW-ON TAPE HIGH INTENSITY D6101

Backing: 65% polyester, 35% cotton

Roll size: width: 1.0 meter --1.27 meters ; length:50 meters

Description: used for Reflective garments, sport cloth, gloves, caps, shoes, bags.etc

Qualified: EN471 ,ANSI 107 ,AS/NZS 4602, equal to 3M 8910

Color:Sliver

Technology Data:

1>. Retroreflective Performance (Initial)

Measured reflectivity coefficient in CD/ LUX. M2

Product	D6101							
Observation Angle	Entrance Angle ($\epsilon_1= 0^\circ$)				Entrance Angle ($\epsilon_2= 90^\circ$)			
	5°	20°	30°	40°	5°	20°	30°	40°
12'	480.2	456.9	447.5	360.4	467.8	454.2	444.5	332.5
20'	318.2	309.3	295.5	240.7	317.8	314.3	305.3	255.8
1°	35.3	34.8	33.1	22.7	29.9	331.3	30.6	24.7
1°30'	18.3	16.9	12.8	14.1	16.2	15.2	13.5	14.9

2>. Folding in Minus 20 degree

After folding according to EN471,ANSI107 standard at -20 degree

Post Exposure Coefficient of Retroreflection (R_A) – cd/(lx*m2)				
Observation Angle =12'				
Entrance Angle = 5°				
Product	$\epsilon_1= 0^\circ$		$\epsilon_2= 90^\circ$	
	Measured	Required	Measured	Required
D6101	479.4	100	457.1	75

3>. Exposure to temperature Variation

12 hours @ 50°C/ 20 hours @ -30°C/ 2 hours @ 20°C

After testing 3 times, Reflectivity is as below:

Post Exposure Coefficient of Retroreflection (R_A) – cd/(lx*m2)				
Observation Angle =12'				
Entrance Angle = 5°				
Product	$\epsilon_1= 0^\circ$		$\epsilon_2= 90^\circ$	
	Measured	Required	Measured	Required
D6101	474.2	100	464.6	75

4>. Washing @ 60°C

After 25 washing, the Reflectivity can keep 80% of initial , After 50 washing cycles ,all results Meet EN471 class 2 & ANSI107 class 2

Number of Wash Cycles: 50 times				
Post Exposure Coefficient of Retroreflection (RA) – cd/(lx*m2)				
Observation Angle =12'				
Entrance Angle = 5°				
Product	ε ₁ = 0°		ε ₂ = 90°	
	Measured	Required	Measured	Required
D6101	135.5	100	107.6	75

5>.Dry cleaning: 5 times

Number of Wash Cycles: 5				
Post Exposure Coefficient of Retroreflection (RA) – cd/(lx*m2)				
Observation Angle =12'				
Entrance Angle = 5°				
Product	ε ₁ = 0°		ε ₂ = 90°	
	Measured	Required	Measured	Required
D6101	401.5	100	400.2	75

6>.Abrasion

According to ANSI/ISEA 107-2004 9.4.1 &EN530 1994
(Wool Abrade /5000 cycles/9kpa)

Post Exposure Coefficient of Retroreflection (RA) – cd/(lx*m2)				
Observation Angle =12'				
Entrance Angle = 5°				
Product	ε ₁ = 0°		ε ₂ = 90°	
	Measured	Required	Measured	Required
D6101	411.9	100	408.2	75

7>.Flexing

According to ANSI/ISEA 107-2004 9.4.2 & ISO7894:1995 method A(7500 cycles)

Post Exposure Coefficient of Retroreflection (RA) – cd/(lx*m2)				
Observation Angle =12'				
Entrance Angle = 5°				
Product	ε ₁ = 0°		ε ₂ = 90°	
	Measured	Required	Measured	Required
D6101	436.3	100	432.2	75