

# Nar Windshield-5mil-Product Manual

## 1.Product Composition

Hard Coating
PET film
PSA
PET film
PSA
PET Liner

## 2.Technology Standards

### 2.1.Appearance and performance

item	window shield-5mil-2ply	
usage	Car Window Protection	
spot defect	calibre<0.5mm	not required
	0.5mm≤calibre<1.0mm	≤3.0×S,↑
	1.0mm≤calibre<1.5mm	≤2.0×S,↑
	calibre≥1.5mm	not allowed
wrinkles	VisualInvisibility	not allowed
stripe	VisualInvisibility	not allowed
linear flaw	breadth<0.1mm	not required
	0.1mm≤breadth≤0.3mm Scratch distance≥100mm lengths≤30mm	≤2.0×S,↑
	breadth>0.3mm or lengths>	not allowed
(of beverages) sparkling	VisualInvisibility	not allowed
leak glue	VisualInvisibility	not allowed
markings	-	Does not affect safe driving or can

#### Description of test method:

1. S is the film area in square metres, retaining two decimal places
2. Dense presence means that the number of defects is more than 5 in any diameter φ100mm circle; 3. All appearance abnormalities are measured by the densest area of sampled abnormalities;
4. Point defects include crystal points, bumps, shrinkage holes, fish-eye points, etc;
5. Linear defects include adhesive surface lines, bubble lines, stop marks, indentations, ribs, horizontal

### 2.2.norm

items	window shield-5mil-2ply
Thickness(finishedproduct)	150±5 (μm)
Thickness (PET&HC&glue)	127±3 (μm)
Thickness (PET)	23±1 (μm)

### 2.3.1Physical performance indicators

item	window shield-5mil-2ply	
Test items	Test results	
dimensional stability	MD	≤0.5 (mm)
	TD	≤0.4 (mm)
Finished product release force		≤35 (g/25mm)
24h, 180°Peeling force (for toughened glass))		≥600 (g/25mm)

Note: The above data are laboratory test data

### 2.3.2 Characteristics

items	window shield-5mil-2ply	
Test items	Test results	Test Methods/Standards
water contact angle	$\geq 100$ (°)	consultation DL/T864 附录A
acid and alkali resistance	No visually visible coating disadvantages	experimental method
Abrasion resistance	2000/ok	0000#, 1kg
Surface hardness	$\geq 2H$	500g Pencil hardness
transmittance	$\geq 80\%$	LS182(FULL)
UV absorption	$\geq 99\%$	LS182(FULL)
haze	$\leq 2.0$	ASTM
Hardened layer adhesion	OK	bagatelle

#### Test method description:

1. Acid and alkali resistance, 10% solubility hydrochloric acid, 0.1 mol / L sodium hydroxide solution, coated specimen surface after the natural placement of 24h, evaluation of the specimen appearance without visually visible bubbles, cracking and other coating defects;
2. Wear resistance, sample hardened layer surface 1kg 0000# steel velvet, back and forth friction 2000

## 3.Storage conditions

	window shield-5mil-2ply
Model	
Temperature	15~25 (°C)
Humidity	40~60 (%)

#### Instructions:

1. All glass shield armour products need to be stored in the original packaging, and the use of raw materials for the protection of materials; 2. It is recommended to use sealed preservation, placed vertically in the best storage solutions, to avoid direct sunlight, heat sources in direct contact;
3. Strict implementation of storage temperature and humidity control requirements, is the product

## 4.Production and construction specifications

item	Window shield-5mil-2ply
Temperature	15~25 (°C)
Humidity	40~80 (%)
Cleanliness degree	Clean, no visible dust

#### Instructions:

1. All glass shield armour products in the use of the process of cutting, carving should be operated in the appropriate environment, to avoid the temperature, static electricity, adverse environmental conditions for the product appearance and performance of the impact; 2. Construction must be strictly done before the cleaning of automotive glass pre-treatment work, to avoid residual particles in the paint, oil and dirt

items	window shield-5mil-2ply
Warranty Periods	3 years
Warranty contents	Cracking of base material, peeling off of coating and bubbling of rubber layer

#### Description:

1. All glass shield armour products weathering to meet the requirements of the provisions of the storage conditions and standardised construction procedures; 2. All glass shield armour products within the scope of the warranty project shall strictly comply with the product use and maintenance specifications, for