

*the* FILM & SOLUTION



Information for coating applications

SHARECHEM

# ABOUT US

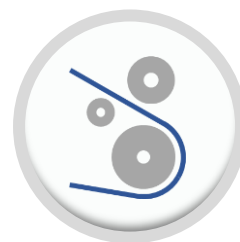
SHARECHEM creates a great future as the global leader for nanomaterials, thermal insulating film & paste, functional coating solution, and the film industry, with our unique technologies. We have manipulated solutions and films with high-performance functions. We provide the best innovation and satisfaction through our innovative and creative techniques and products with the customer in mind. Also, we are reaching the infinite possibilities and future in the advanced functional coating applications field.



| functionalized nanoparticles |



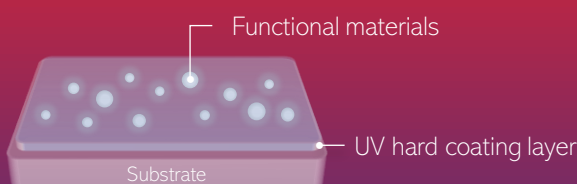
| special designed coating solutions |



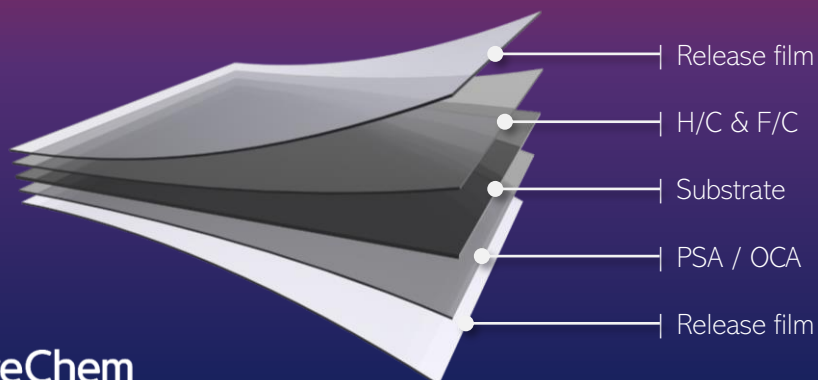
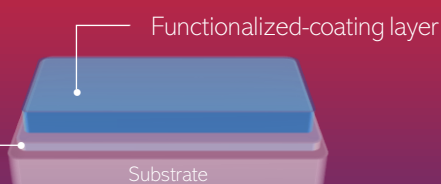
| high-performance films |

To match different specifications and flexible substrates to each customer, we offer order production films and coating solutions. We promise to always provide high-quality products

One-pot functional hard coating film



High-performance functionalized hard coating film

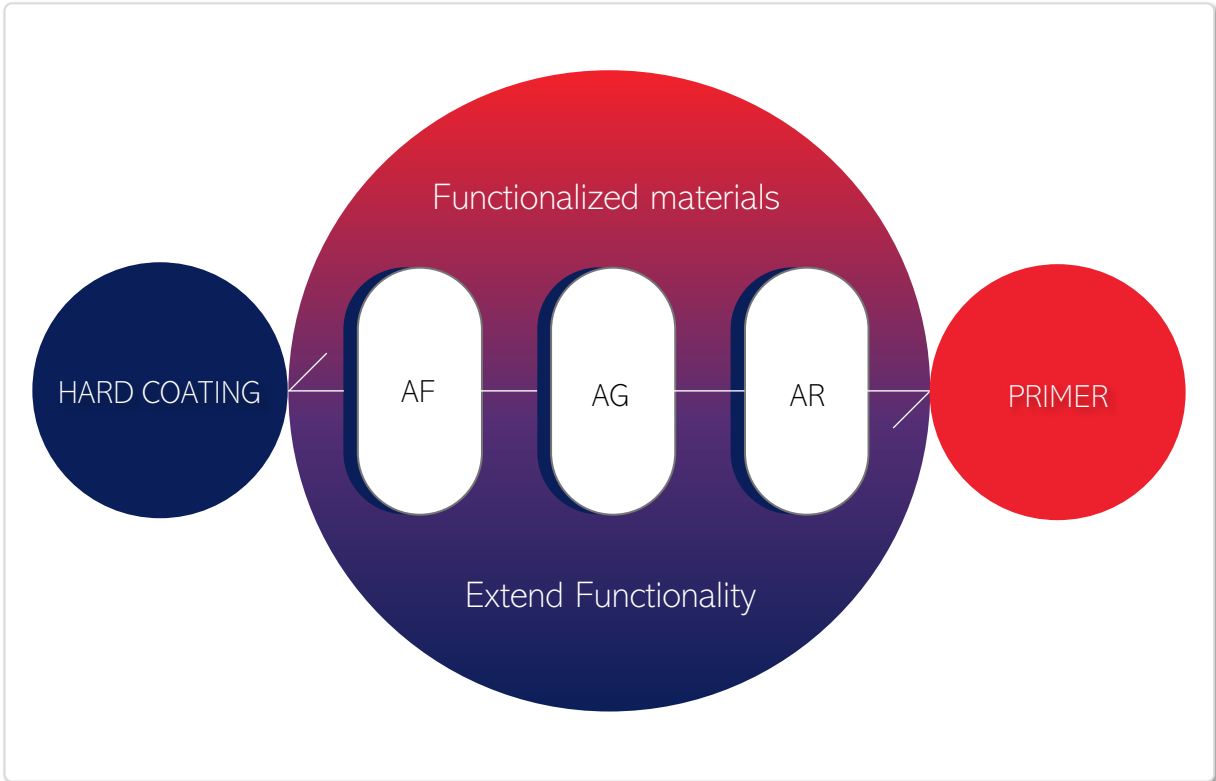


**ShareChem**

| Schematic of a general architecture of the functionalized-hard coating film |

# LINE UP

| High-performance organic-inorganic hybrid hard-coating applications |



## HARD COATING | SCHD

High-hardness hard coating  
 Hard coating for 3D forming  
 High flexible hard coating  
 Hard coating with anti-fingerprint(AF)

## ANTI-GLARE | SCAG

High hardness antiglare(9H)  
 Flexible antiglare  
 High transmission antiglare  
 Paper texture antiglare  
 One pot AF/AG

## ANTI-FINGERPRINT | SCAF

Anti-fingerprint for spray coating  
 UV curable AF for roll to roll coating

## ANTI-REFLECTION | SCAR

Highly transparent antireflection  
 Good hardness

## PRIMER | SCPM

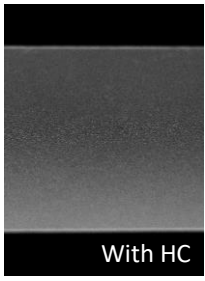
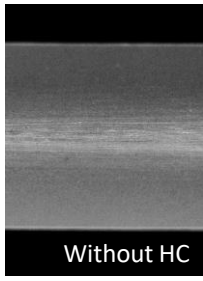
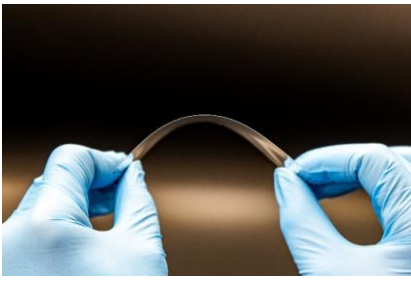
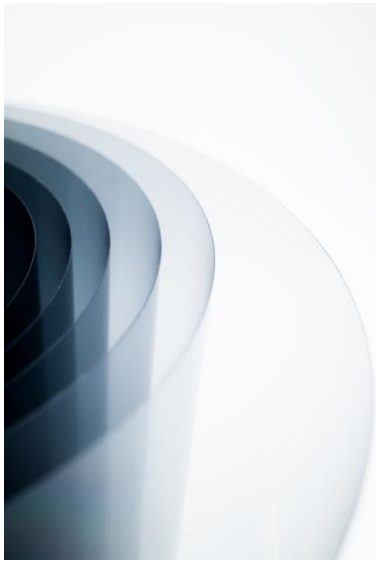
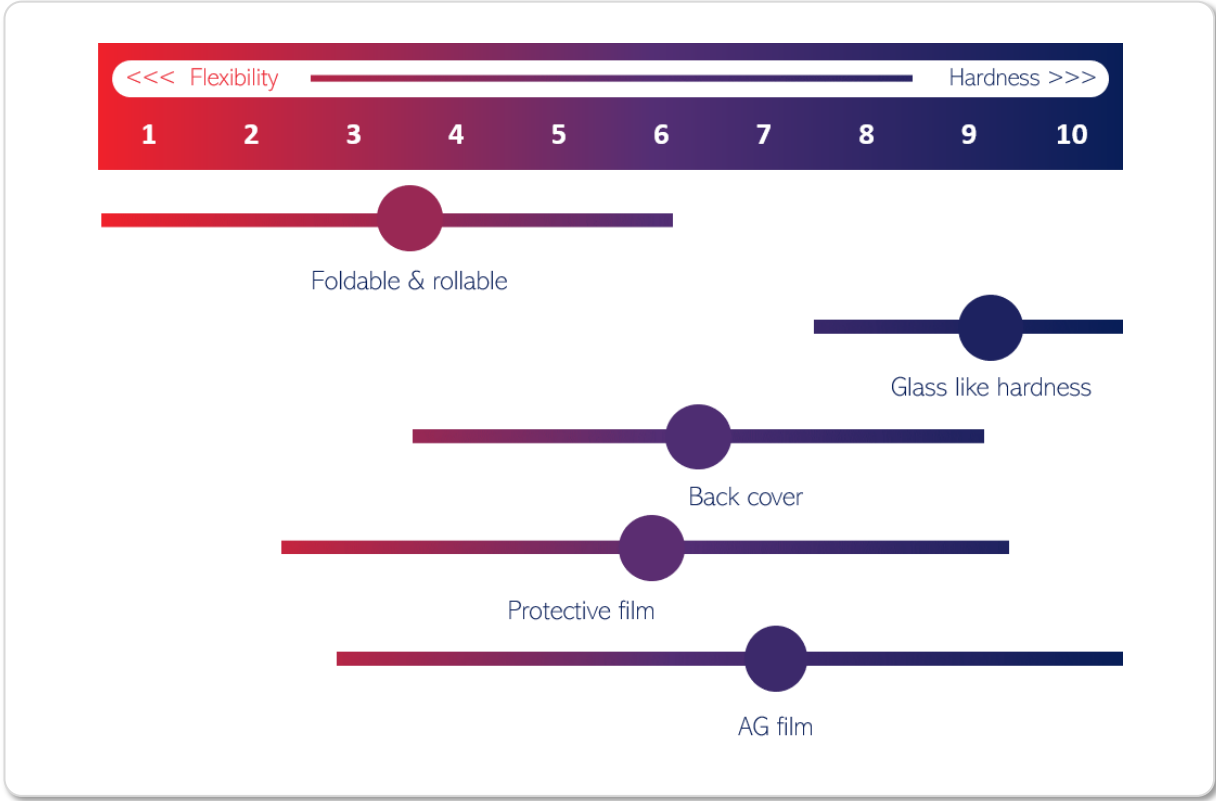
Good adhesion with various substrate  
 Low temperature curable primer

## Customizing available !

A customized product is specially designed and manufactured for individual customers to meet their needs.

# HARD COATING FILM | SCHDF

SCHD series comprise high hardness coating with protecting various plastic substrate surfaces such as PC, PMMA, PET, PVC, TAC, and CPI applied as UV curable coating solutions. It has the best performance of high hardness and highly flexible film designed with the user in mind. It has been easy to control hardness and flexibility by the order.



| Various applications of the functionalized-hard coating film |

# SCHDF

## | Product List

Film code	06PT15	01PT15	10PT40D	03PC15	06PM15
Substrate	PET (188 $\mu$ m)	PET (188 $\mu$ m)	PET (75 $\mu$ m)	PC (100 $\mu$ m)	PMMA (100 $\mu$ m)
Character	High hardness	Flexibility	High hardness	Both	Both
Thickness ( $\mu$ m)	15	15	40 / 40	15	15
Hardness	6H	H	> 8H	3H	6H
Transmittance (%)	> 90	> 90	> 90	> 90	> 90
Haze (%)	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Contact Angle(°)	95°	85°	95°	90°	95°
Bending	40R	< 5R	60R	20R	50R

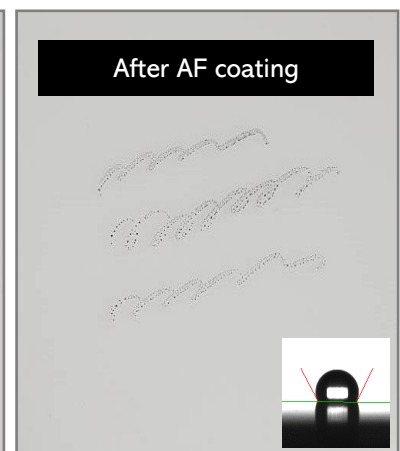
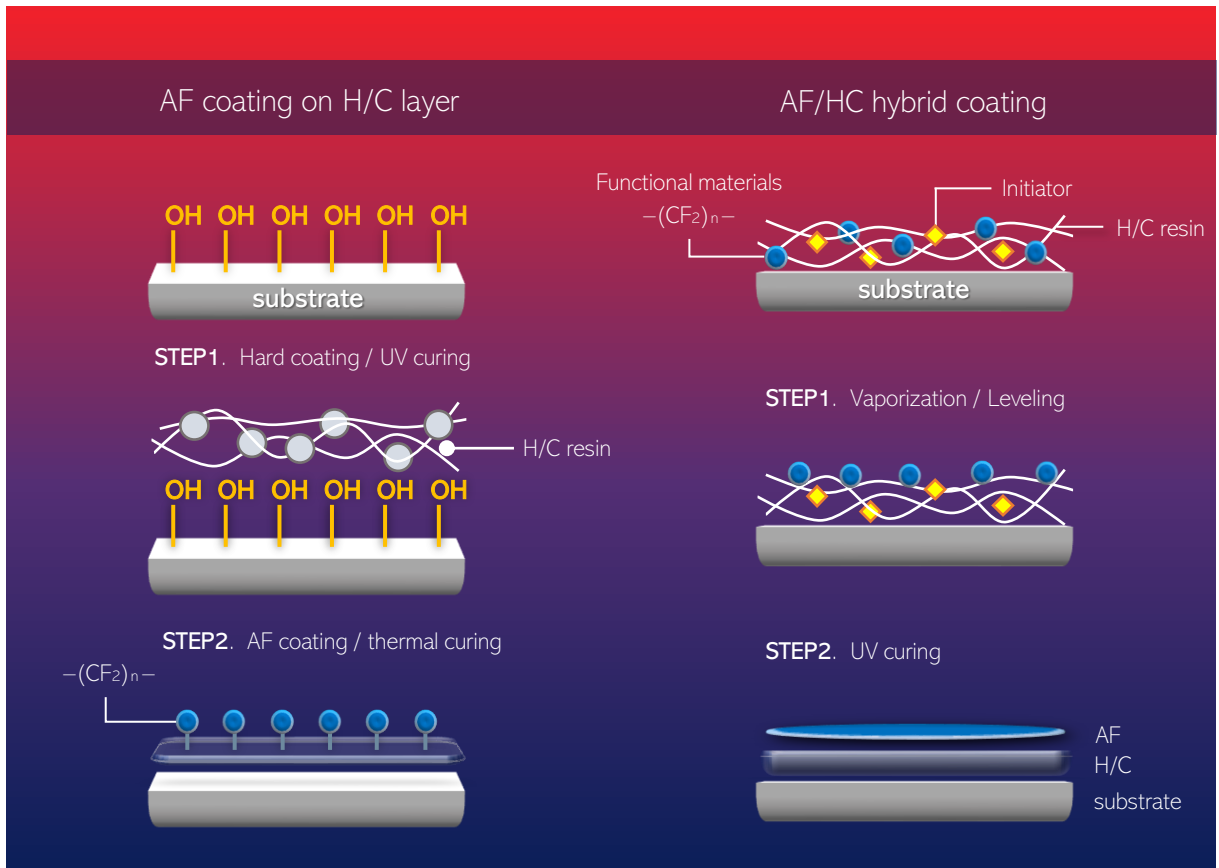
## | Code definition and meaning

Hardness — **06** — **PT** — **15** — Thickness  
 Substrate



# ANTI-FINGERPRINT FILM | SCAF

SCAF can be applied on the surface of substrates such as glass, plastic, and metal surfaces to improve surface slip, anti-fingerprint, and scratch resistance because it is a surface coating with a fluorinated polymer with 20-1000 nanometers thickness. It has excellent water and oil repellency, as well as anti-fouling properties with high hardness as a UV curing system. And also, the SCAF coated substrates can be protectively display and are easy to clean.



| Image of the SCAF coated PET film and their surface property |

# SCAF

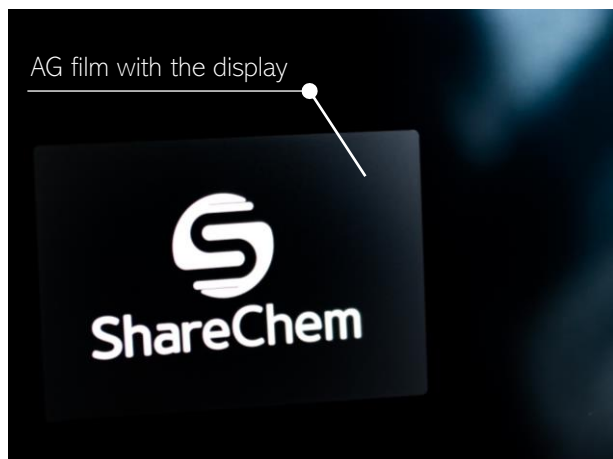
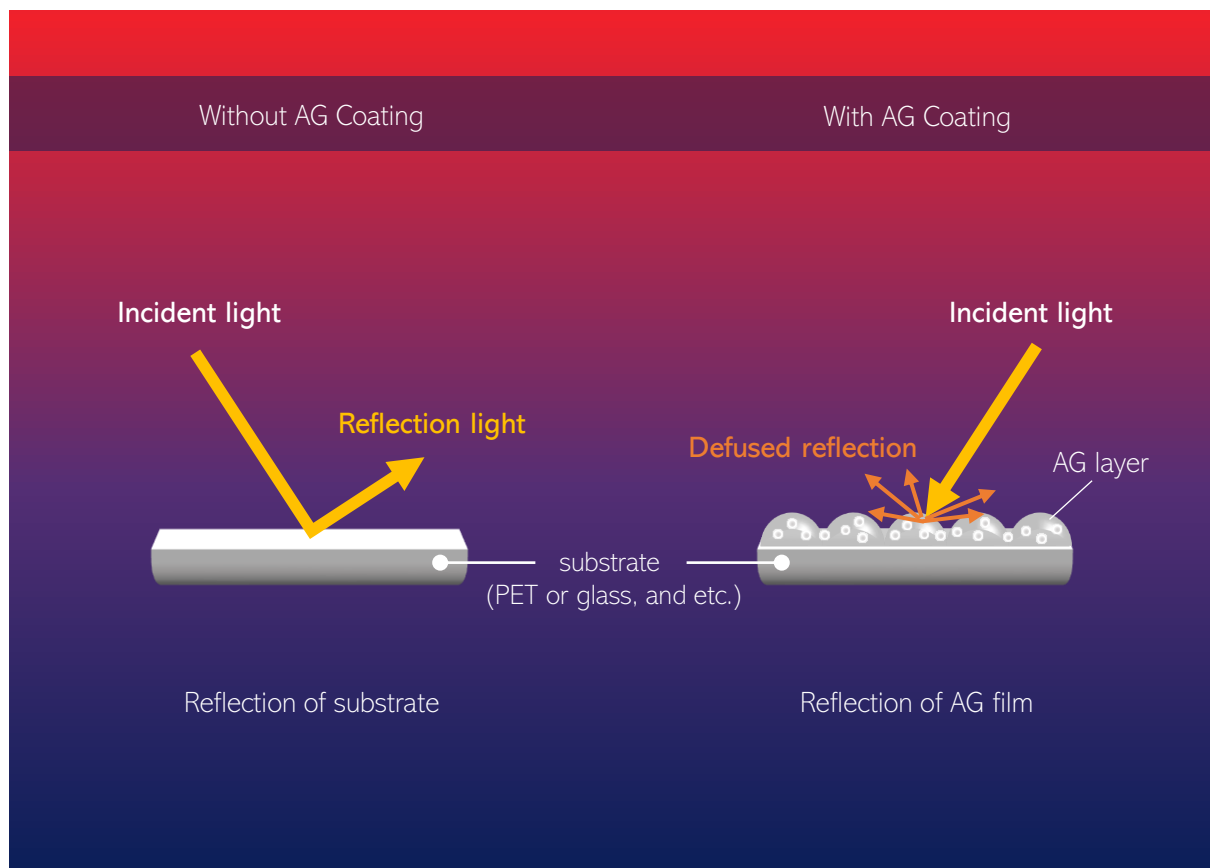
## | Product List

Film code	SCDHF-AF	11F
Substrate	75 µm PET	75 µm PET / HC
Character	High hardness & flexibility, anti-fingerprint	For spray coating
Thickness	15 µm	20 nm
Hardness	6 H	9 H
Transmittance (%)	91.8	91.2
Haze (%)	0.32	0.4
Contact Angle(°)	114±2	116±2



# ANTI-GLARE FILM | SCAGF

We manufacture high-performance anti-glare film (SCAGF) using R2R coating, which is microgravure and spray coating. It has an excellent high hardness (9H), flexibility, and unique optical property with sparkling free. Also, we can fabricate and supply SCAGF film with a controlled haze of the film 5%-60% with the customer's order in mind.



| The AG hard-coated film applied to the display |



# SCAGF

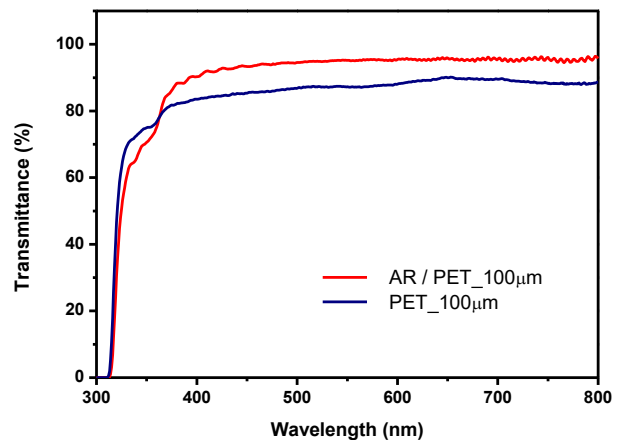
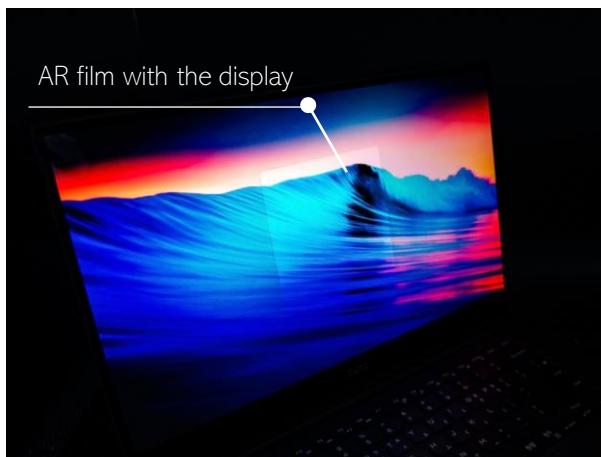
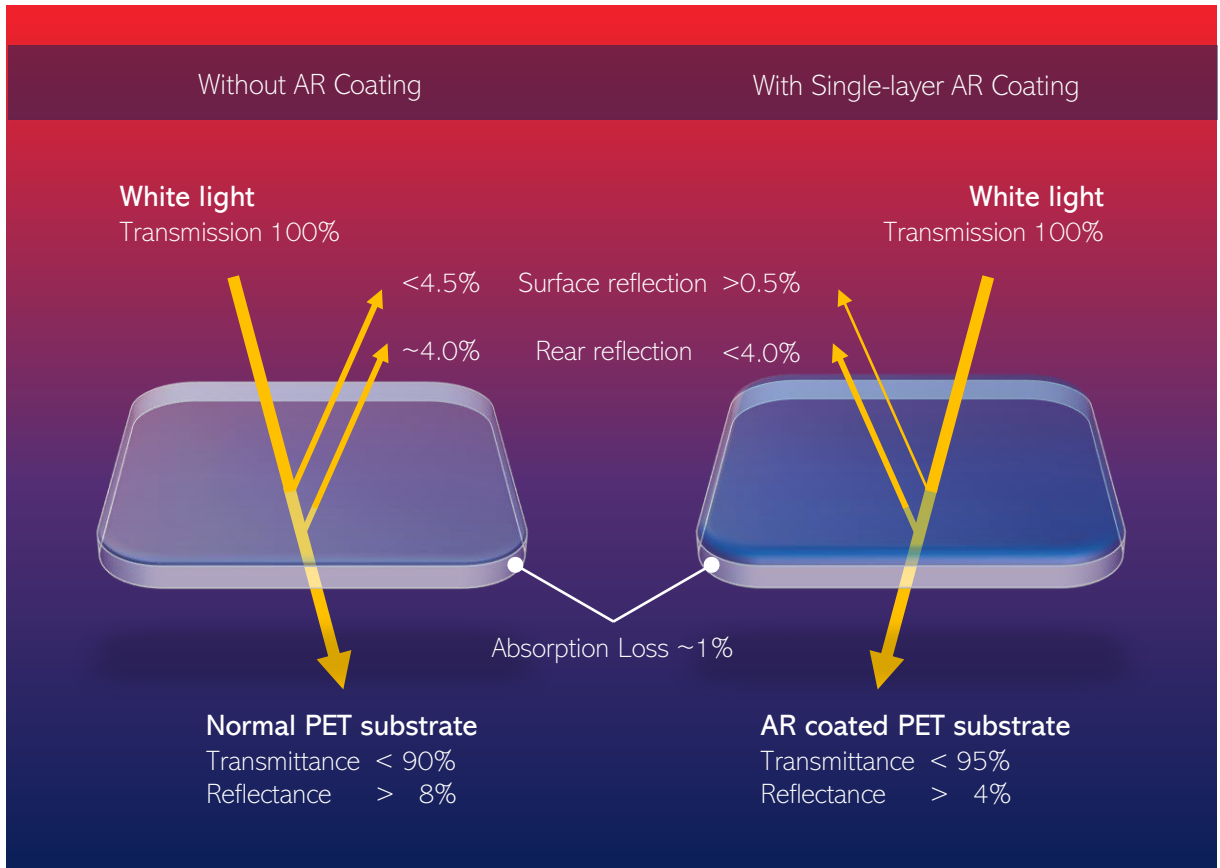
## | Product List

Film code	HDAG	HTAG	AGPL	AFAG
Substrate	100 μm PET/HC	75 μm PET	75 μm PET	75 μm PET
Character	High hardness Paper Texture Sparkling free	Flexibility Sparkling free Anti-fingerprint High transparency	Flexibility Paper Texture (High roughness)	Flexibility Sparkling free Anti-fingerprint
Thickness (μm)	3~5	3~5	3~5	3~5
Hardness	9H	4H	4H	4H
Transmittance (%)	92.27	92.42	90.22	90.25
Haze (%)	30 (±2)	30 (±2)	10	8
Contact Angle(°)	90±10	90±5	50~90	103±3
Bending	<10R	< 2R	< 2R	< 2R



# ANTI-REFLECTION FILM | SCARF

SCAR can be applied on various substrates by general coating processes such as spray, R2R, slot die, etc., and it is advantageous. For the film process with a low-temperature curing system. (nanosize  $\text{SiO}_2$ -based AR solution/8-9H pencil hardness on glass) It has also excellent transparent (over 94%) with low reflection.



# SCARF

## | Product List

Film code	SHPC51
Substrate	75 µm PET or various substrates
Character	Anti-reflection
Coating method	Spray, Microgravure, Slot die, Bar
Hardness	B on PET, > 8H on Glass
Transmittance (%)	>94 (on 75 µm PET)
Curing	Thermal condition



# FUNCTIONALIZED COATING SOLUTIONS

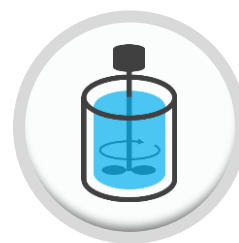
We are supplying functionalized coating solutions, which have high performance and excellent workability. It is easy to coat on various substrates such as PC, PMMA, PET, CPI, Glass, and organic/inorganic material. Also, we can easily control the character of the hardness and flexibility of the coated plastic substrate. Also, we have the hybrid-formulation technology of specially designed resin, a hard coating material, and various functional elements related to AF, AG, AR. So, we can be easily manufactured and supply a customized product for individual customers to meet their particular needs. Besides, we can provide information and products of the primer to solve problems caused by low adhesion between the substrate and the coating solution.



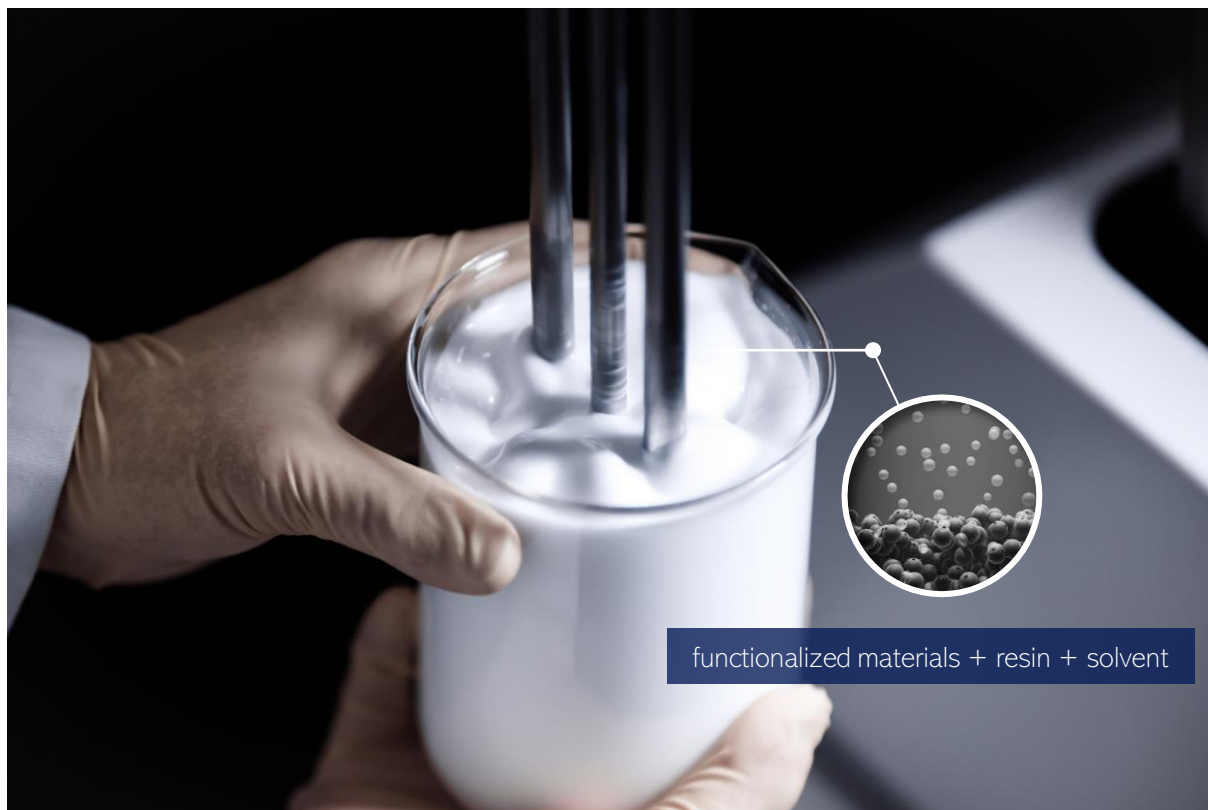
| functionalized materials |



| special designed resin |



| formulation technology |



# COATING SOLUTIONS

## | Product List

HD series	Product Code	Characteristic
	LKUH	High hardness
	LKUG (01 ~ 10)	Hardness, Flexibility
	LKUF	Good flexibility
LKAF	High hardness, Anti-fingerprint	
AG series	Product Code	Characteristic
	76HC-P	Paper texture, Sparkling free, Haze 5~60
	746HCG	Super slip, Sparkling free, Haze 5~60
PTAG	Paper texture AG, Low sparkling	
AF series	Product Code	Characteristic
	011F	Spray type, Scratch resistant, Super slip, DIW 115±2°
	2011F	1011F concentration
CHLF	Roll to Roll AF, Scratch resistant, DIW 110±5°	
AR	Product Code	Characteristic
SHPC51	Roll to Roll type, High transmittance	
Primer series	Product Code	Characteristic
	MAP50	Ester based primer
	LT10	Urethane based primer
UVP73	Acrylate based primer	





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