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# ***All Of Materials***

***Professional leader in customized functional coating and  
Performance chemical raw materials***

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# Introduce the Company



AOM Co., is a company specializing in coating chemical solutions and surface treatment agents, which are the core of the parts and materials industry, and is conducting steady R&D and efficient mass production.

In addition, based on complex functional coatings, we are responding individually to customer needs with plastic, film, sheet material coatings that include various functions.



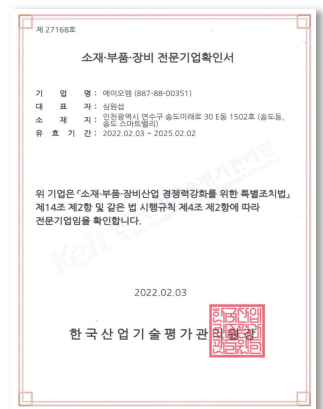
Patent



Venture Company



R&D specialized



Material specialist

- Specialized of Antistatic coating solutions and functional chemical primer for Flow, Roll To Roll coating process
- Under mass production functional chemical powder
- Supply the Antistatic and additionally Antistatic plus hard coating solution.
- Conducting a Korea Government research project (2019~)
- Commercially released UV curing anti-bacteria coating (Certified by FITI, 2020)
- Registered patent of Complex functional Flame Retardant, Antistatic coating solution (2020.08)
- Functional Flame retardant coating solution patent registered (2020.10)
- R&D project selected by Ministry of Trade, Industry and Energy of Korea government and Incheon metropolitan city (2021~)

## Measure equipment

UV Curing	Chamber	Pencil hardness	Steel wool
Coating Test	Coating Test Reliability test	Surface hardness	Coating surface properties
Optical Measuring	Surface resistance	Precision scale	Contact angel
Transmittance(%) Haze	Antistatic Performance	Formulation technology	Surface tension

## Functional coating

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### 01. Anti-static Coating

Control of static electricity, prevents damage, secures high safety

### 02. Clear Hard Coating

Excellent optical properties, prevention of damage from external stimulation

### 03. Printable Hard coating

Enables processing such as additional repainting and printing in UV curing

### 04. Anti-bacteria coating

Inhibits and reduces the growth of bacteria

### 05. Anti-blocking

In the case of UV curing coating, the contact surface is closely adhered, bonded by continuous pressure, heat, and moisture, which causes damage to the film.

### 06. Anti-finger Print (Anti-pollution)

Prevent from coating surface pollution and easy cleaning

### 07. UV-molding, imprint coating

Solid content 100%, VOCs-Free, available various patten, molding

## Multi-Function coating

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- ▶ Complexed type one coating solution with Anti-pollution, Antistatic, Anti-bacteria
- ▶ Printable and anti-blocking Solution for **ITO film**
- ▶ **Anti-Glare** Coating with UV Cut, Hardness for Display, PDLC Film
- ▶ Specially Customized coating for customer, market needs

# Functional coating

## 01. Anti-static coating

- ▶ Prevents damage caused by electrostatic charge by suppressing the generation of static electricity in the coating material and realizes user safety.

Property	Heat drying type	UV Curing type
Surface Resistance ( $\Omega/\square$ )	E4~10	E5~10
Transmittance(%)	More 99%	More 99%
Pencil Hardness (Based on 750g)	-	> 2H
Drying & Curing method	Spray, Roll to Roll, Dipping	Flow, Roll to Roll

※ Core material : PEDOT-PSS, Transmittance(%) spec is compared to base substrates.

### UV Curing

#### 1. Antistatic for **Sheet**

- ▶ Substrates requiring excellent flowability and solvent resistance (within N.V. 5%)
- ▶ Available of various surface resistances (E4~9)

#### 2. UV Hard coating for **Film**

- ▶ Can be controlled according to customer request
- ▶ Features such as surface hardness, scratch resistance, AG, blue cut, etc.
- ▶ Excellent surface hardness and solvent resistance (antistatic hard coating-N.V. around 20%)
- ▶ Various surface resistances (E5~9) can be realized

### Heat drying

#### 1. Antistatic for **Film**

- ▶ Alcohol resistance, water resistance available
- ▶ Fast drying speed, available of various resistance specification
- ▶ Can be used as adhesive protective film, mold tray, antistatic primer, etc.

#### 2. Performance **Primer**

- ▶ Overcoat such as hard coating is possible,
- ▶ Realization of antistatic performance on attached flame retardant materials

#### 3. **Optimized, Customized** coating performance

- ▶ Possible to improve adhesion to different substrates by using various binders, Various surface resistances (E5~9) can be implemented

## 02. Clear Hardcoating

- ▶ High hardness, high optical performance (high transmittance, low Haze)
- ▶ Flexible, Bending performance such as IML (In Mold Lamination), etc.
- ▶ Various functionalities can be added to meet customer needs

## 03. Printable Hardcoating

- ▶ various after-processes such as printing and deposition on hard coating film
- ▶ Securing repaint ability with high surface tension (more than 34 dyne)
- ▶ High optical performance (high transmittance, low Haze)

## 04. Anti-bacteria coating

- ▶ High hardness, high optical performance (high transmittance, low Haze)
- ▶ Sustained antibacterial performance (antibacterial activity 3.0 over)
- ▶ Good wettability and slip

## 05. Anti-blocking coating

- ▶ Good slip and anti-blocking performance
- ▶ Various ways to respond to customer needs

## 06. Anti-finger print (Anti-pollution)

- ▶ High hardness, high optical performance (high transmittance, low Haze)
- ▶ Able to realize high contact angle
- ▶ Various functions can be added to meet customer needs

## 07. UV-mold(imprint) coating

- ▶ High transparency
- ▶ No volatile organic solvents used
- ▶ Excellent hardness and flexibility
- ▶ Various functions can be added to meet customer needs

Grade	Clear coating	Printable coating	Anti-Bacteria coating	Anti-Blocking coating	AF coating	UV-mold
PencilHardness	≥2H	H	2H	H~2H	≥2H	Customer needs
Transmittance	≥90%	≥90%	≥90%	≥90%	≥90%	≥90%
Haze	<1%	<1%	<2%	<1%	<1%	≤2%
Contact angle	-	≤70°	105±5°	75°~95°	≥110°	Customer needs
SurfaceTension	-	≥34Dyne	-	≤28Dyne	-	-
Anti-scratch	-	-	-	-	≥1,000 time	-
Coating method	MicroGravure, Slot die coating, Spray, Flow process					imprinting



# Multi-function coating

► Anti-bacteria, anti-pollution, Antistatic functions realized with one coating

## UV curing type

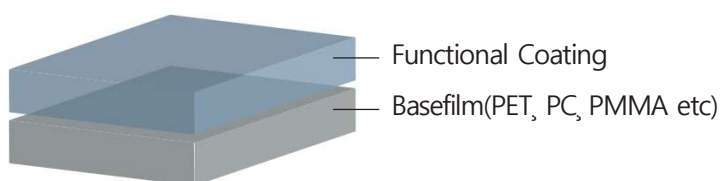
TYPE	function	Hardness	Wear Resistance	Chemical Resistance	Optical property	Forming	Anti-Static	Anti-Bacteria	Anti-Pollution
Clear Coating	Hard coating	◎	◎	◎	◎	○	-	-	-
	Anti-static	◎	◎	○	○	-	◎	-	-
	Anti-bacteria	◎	◎	○	○	-	-	◎	-
	Anti-pollution	◎	◎	○	○	-	-	-	◎
	Anti-blocking	◎	○	○	○	-	-	-	-
	IML	○	○	○	◎	◎	※	※	※
	General	○	○	○	○	-	-	-	-

## Hear dry type

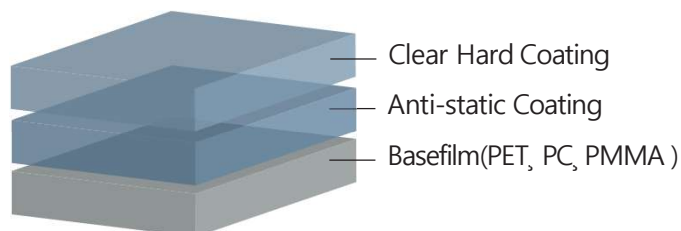
PRODUCT	Optical property	Anti-Static	Anti-Bacteria	Remark
Anti-static	○	○	○	Antistatic surface treatment
Anti-bacteria	◎	◎	◎	Surface treatment for antibacterial
Primer	-	-	-	Adhesion, attachment improvement

## Application

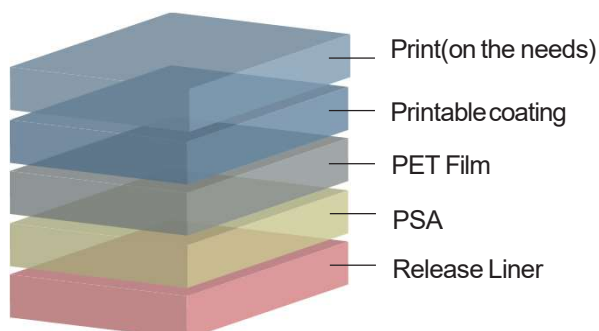
### Hard coating



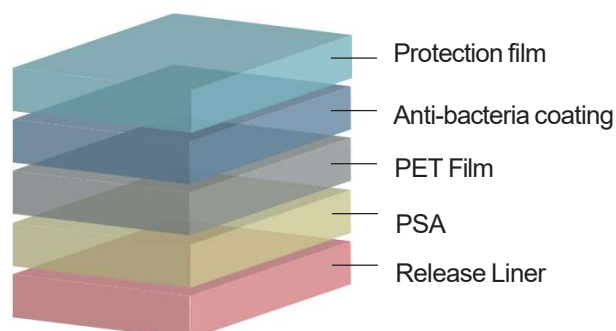
### Anti-static coating



### Printable hardcoating



### Anti-bacteria coating



# Multi-function coating

## ► Printable & Anti blocking Coating for ITO Film

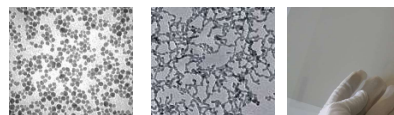
### Features

- Good anti-blocking effect
- Good printable property
- Clear Optical characteristics

### ▪ UV-curing type

### Application

- Touch Panel for display



Item	Representative value	Note
Surface tension	> 34dyne	released protect film after 150°C / 60min
Pencil Hardness	> H	-
Anti-blocking	Lightly slip	-
Haze	Under 1%	HAZE Meter
Solid content	29±3%	120°C / 30min
Coating method	Micro Gravure, Comma, Slot die coating, Etc.	

## ► Anti-Glare & Hard Coating Solution

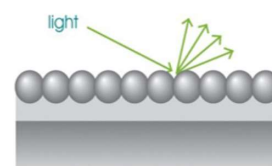
### Features

- Good Anti-Glare effect
- Good hardness and UV Cut performance
- Low friction coefficient
- Customized Haze (5~24%)

### ▪ UV-curing type

### Application

- Display, PDLC, etc



Item	Representative value	Note
UV-cut performance	Under 1%	380nm
Pencil Hardness	> 2H (750g)	PET film base / 750g
Friction coefficient	> 20 time (500g)	Steel wool
Haze	5~7%	HAZE Meter
Contact Angle	≥ 100	DI Water
Coating method	Micro Gravure, Comma, Slot die coating, Etc.	

# Application



 **Anti-static**



 **Hard coating**



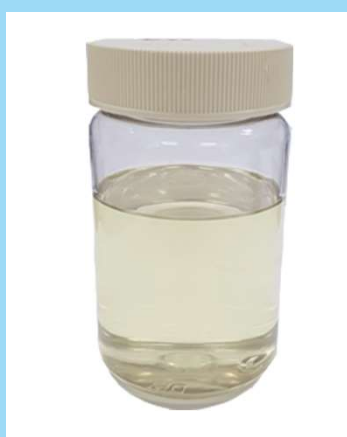
 **Printable  
Hard coating**



 **Anti-bacteria  
coating**



 **Anti-pollution**



 **UV-mold**



 **Primer**



# ***Applications***



***Anti-static***



***Clear***



***Printable***



***Anti-glare***



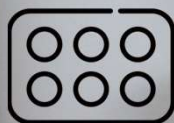
***Anti-blocking***



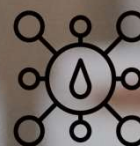
***Anti-pollution***



***Anti-bacteria***



***UV mold***



***Various  
Function***