

SURECO™ AF Series



AGC

Your Dreams, Our Challenge

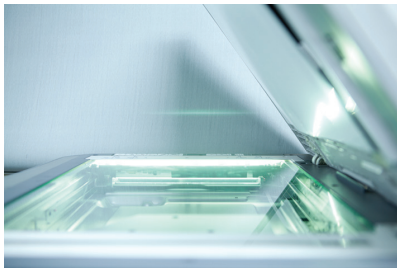
SURECO™ AF Series is a surface coating agent containing a fluorinated polyether. Excellent water and oil repellency, as well as anti-fouling properties, are achieved without altering the appearance, by forming a thin monomolecular layer on a surface such as glass. SURECO™ AF Series is suitable for wet coating, spray coating, dip coating and spin coating.

Features

- Water and oil repellency
- Anti-fouling, anti-fingerprint
- Thin film thickness (<10nm)
- Low friction
- High durability for abrasion
- Non-flammable

Applications

- Touch panels
- Mobile phone chassis
- Mould releasing agents
- Anti-fouling for metals, plastics, etc.



Grade Range

Grade	Non-Volatile	Sample Package	Commercial Package	
SURECO™ 3320	20%	5g	100g	1kg

SURECO™ can be further diluted using a fluorinated solvent

Properties

		Unit	Value*	Remarks
Contact Angle (Water)	Initial	113	Deg. (°)	
	Abrasion Test with Steel Wool	108	Deg. (°)	1kg/2000 times
Contact Angle (Hexadecane)		68	Deg. (°)	
Friction Coefficient		0.045	Deg. (°)	OA Paper

*The physical properties are typical values, not guaranteed values

Fingerprint Test

Fingerprint (not wiped)

Fingerprint (after wiping once)

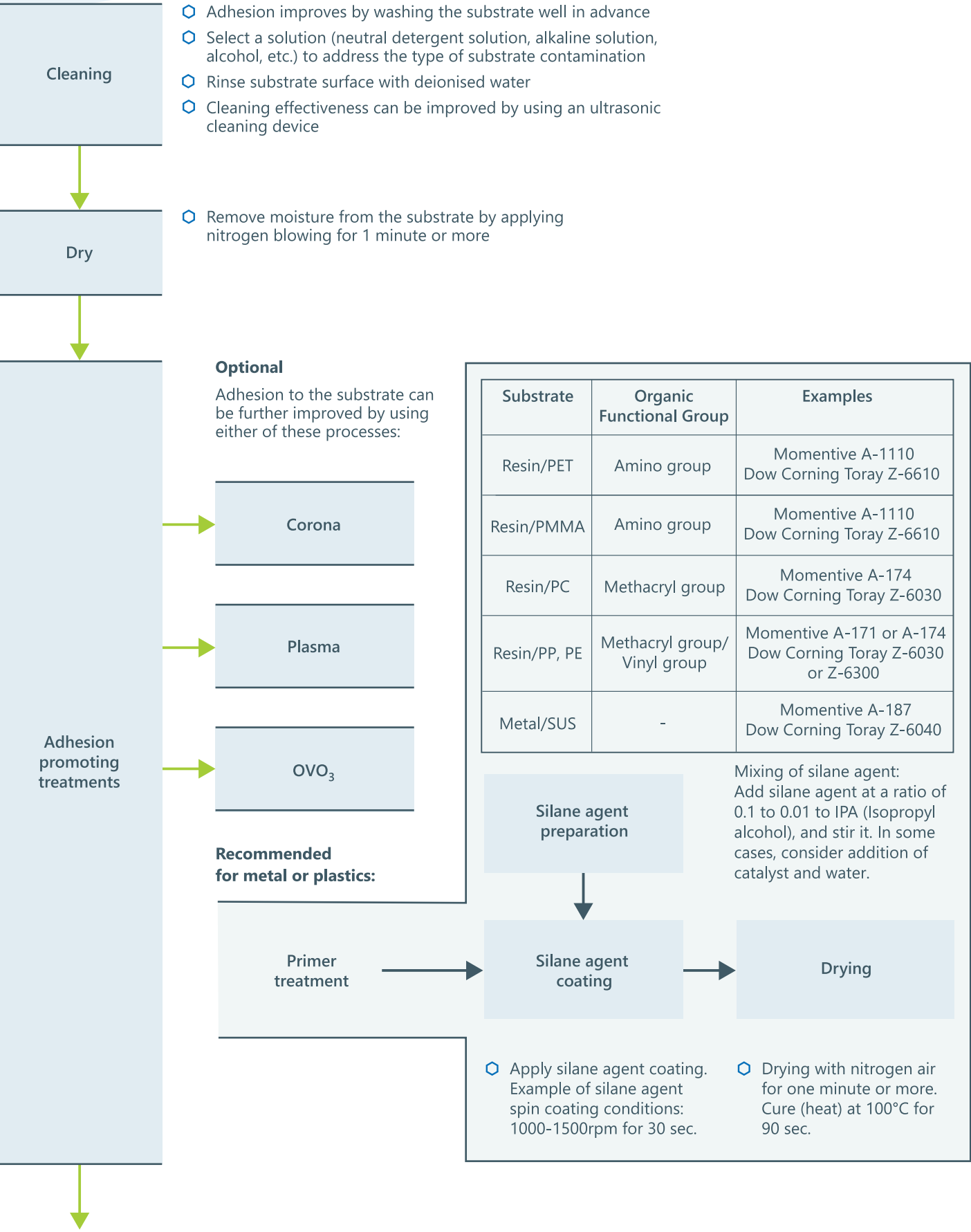
SURECO™ AF Series treated glass

Untreated glass

Application Process

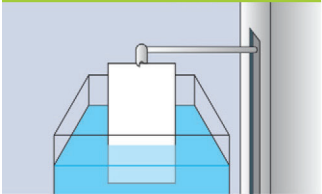
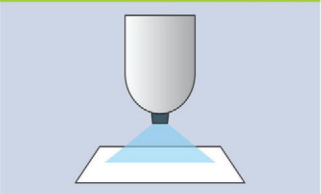
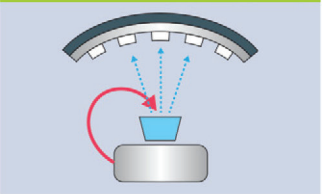
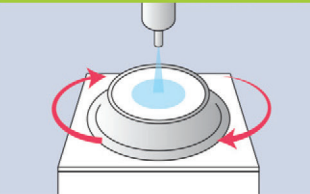
Recommended surface preparation

Proper cleaning of the surface and optional secondary treatments improve the SURECO™ coating adhesion.



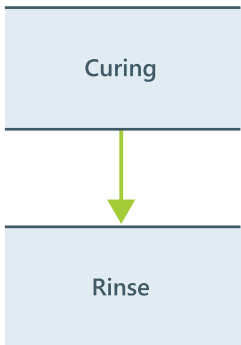
Coating Process:

SURECO™ can be applied by many common coating methods:

Dip coating	Spray coating	Vapour deposition	Spin coating
			
<ul style="list-style-type: none">Equipment: Dip coaterPre-treatment: Alkali-cleaning -> CoronaImmersion time: > 1 minutePulling speed: 5-15 mm/sec	<ul style="list-style-type: none">Equipment: 2 fluid nozzle sprayPre-treatment: Alkali-cleaning -> Corona or plasma treatmentSpray amount: 30-60g/m²	<ul style="list-style-type: none">Equipment: PVD (Physical Vapour Deposition)Chamber base pressure: 1.0~3.0x10⁻³ PaSURECO™ AF thickness: 10-15nm	<ul style="list-style-type: none">Equipment: Spin coaterPre-treatment: Alkali-cleaning -> Corona or plasma treatmentSpin speed: 1,000rpm

Curing

The curing process of the SURECO™ coating is essential for good adhesion.

	<ul style="list-style-type: none">Adhesion may not be obtained unless heating or sufficient drying is performed. Example: 120°C for 10 minutes 60°C for 2 hours 25°C for 24 hoursIf the surface is uneven, optionally wipe with soft cloth, or rinse substrate with fluorine solvent (ASAHIKLIN™ AE-3000) or deodorised water
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Safety

See the Safety Data Sheets (SDS) for further details regarding the safe use of this product.

Fire safety, regulatory guidelines, PRTR (Pollutant Release & Transfer Register):
not applicable.

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