Weiss Bonya

Gemini ® Amphiphobic Treatment Agent

AnO-161

[Introduction]

AnO-161 is a nano coating agent with both hydrophobic and oleophobic functions. it is ethanol based one-part self-drying type. Combining interface reaction and surface modification, the coating is air / sound permeable, meanwhile it can completely shield water and oil, it is resistant to moisture, freeze and has long-term weatherability and high oleophobicity grade. It can achieve amphiphobicity on various substrates. It’s use for high-level water and oil resistance while air /gas/ sound permeable applications especially in membrane, vents, filter, synthetic mesh.

[Typical Properties]

Properties	Units	AnO-161
Solid	Wt%	5
Appearance	/	Transparent liquid
Density	g/cm^3	0.8
Solvent	/	Ethanol
Baking Temperature / Time	/	Self-drying 30 mins

[Performance]

Test Item	Test Method	AnO-161
Water contact angle	10～20μL Water mesh / PTFE film	＞140° / 110°
Water fall off angle	10～20μL Water mesh / PTFE film	＜10° / ＜30°
Hexadecane Contact Angle	10～20μL Hexadecane mesh / PTFE film	70° / ＞65°
Hexadecane Fall off Angle	10～20μL Hexadecane mesh / PTFE film	＜30°
Oleophobicity Grade	ISO 14419-2010 mesh / PTFE film	6~7 grade
Air Permeability Loss	PTFE film	＜1/3
Film color / Thickness	Observation / μm	Transparent / 0.1~1
Durability	UV、rain aging chamber	2~3 years
High Temp/High Humidity	85℃×85％RH×100 hrs	Good
Thermal Shock	-40℃×1hr ⇆ 85℃×1hr, 10cycle	Good
Weatherability	UV weather test chamber,100hrs,color aberration within ⊿E=1.0	Good

[Applications]

Membrane applications include, filtration, venting, and diffusion barrier applications.

Venting membranes are used in automotive-related applications such as, headlamps, electric motors, ABS brakes, gas tanks pressure sensors, engine oil sensors and combustion engines.

Venting membranes are used in healthcare applications such as catheters, IV filter vents, suction-related apparatuses, and instruments.

Vents and mesh provide protection from water for water resistant electronics, computer disk drives, headphones, and sound systems.

Membranes can be used for vented packaging, gas sensors and fracking water organics cleanup and separation.

[Applicable substrates]

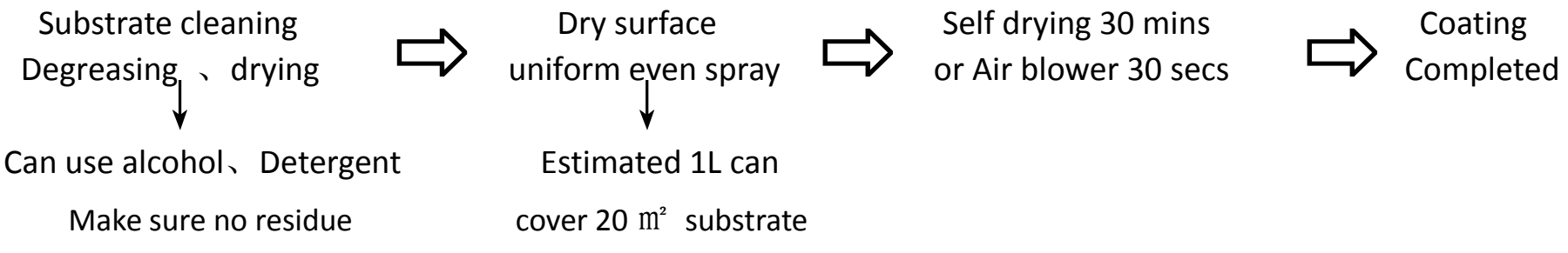
metal, paint, textile, FRP, rubber, gel coat, plastic, foam, circuit board, film, membrane, vents, filter, synthetic mesh, ceramic, glass, wood, cement, stone, etc.

[Processing Method]

Spraying, brushing, dipping. Suggest spraying, make sure the coating is uniform and even. The temperature of the surface to be sprayed should be -15℃~35℃. Keep containers at room temperature prior to use. All surfaces need to be dry and free from wax, grease, and polishes for good adhesion.

Please clean the spray gun with alcohol before and after spraying to avoid cross contamination. The spray gun is set to low pressure and low volume. One-time spraying can achieve certain effect, overlapping spraying can be done as needed. Surface drying time is 15 mins, then can move or transport, make it longer in winter.

Allow the treated surface to self dry for over 30 mins or dry by air blower for 30 secs to reach maximum durability, so suggest testing after 30 mins. For best long- term performance avoid imposing excessive mechanical friction or other surface treatments.



[Attention]

- During processing, avoid direct contact with the skin, using gloves and safety glass in the test. If skin contacts with products, immediately wipe with a dry cloth and then wash skin with soap and water, If eyes contact with products, immediately flush eyes with plenty of water for at least 5 minutes, and call a physician.
- Keep the container sealed and store between **5~35**℃**,** well ventilated locations, shelf life is 3 years.

[Packaging/Transport] 25L plastic jug. Classified as dangerous in the meaning of transport regulations

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