Weiss Bonya

Gemini ® Hydrophobic Oleophobic Hardcoat

AnO-164

[Introduction]

AnO-164 is a permanent hydrophobic and oleophobic hardcoating, it is solvent based one-part self-drying / heat curing type, food-grade non-toxic and eco friendly. Combining interface compact adhesion, it has high transparency and 7H hardness, damp and heat resistance, acid and alkali resistance, super abrasion durability, it brings water and oil repellency to various substrates, keeping it brightly transparent and abrasion resistant.

[Typical Properties]

Properties	Units	AnO-164
Solid	Wt%	40
Appearance	/	Light yellow transparent liquid
Density	g/cm^3	0.9
Solvent	/	PGME / Ethanol
Baking Temperature / Time	/	Self-drying 24 hrs / 130℃ 5mins

[Performance]

Test Item	Test Method	AnO-164
Water contact angle	10～20μL Water	105°
Oil contact angle	10～20μL Hexadecane	70°
Film color/thickness	Observation / μm	Transparent/ 2~8
Hardness	Pencil hardness tester	7H
Adhesion	Cross-Cut Tester	Grade 0
Abrasion Durability	Taber, 10 cycles with CS10 wheel	Good
Solvent Resistance	99.5% alcohol whipping, load 500g/cm2, 100cycle	Good
Acid / Alkali Resistance	30%HCl、30%NaOH drip on the substrate, standing time 24hrs	Good
High Temp/High Humidity	85℃×85％RH×100hrs	Good
Thermal Shock	-40℃×1hr ⇆ 85℃×1hr, 10cycle	Good
Salt Water Spray Test	5% NaCl, temperature 35℃, test time 1000 hrs	Good
Impact Resistance	300N/cm2 front impact and back impact	Good
Heat Resistance	200℃×30mins ⇆ 25℃×15mins, 10cycle	Good

[Applications**]**

Used in machinery parts, medical equipment, furniture, building construction / decoration materials, electrical appliance and electronic equipment shells, bathroom and swimming pool facilities, kitchen utensils / sinks, bathroom ware, outdoor marine and scenic facilities etc.

[Applicable substrates**]**

metal, painted surface, ceramic, brick, wood, cement, stone etc.

[Processing Method]

Spraying, dipping, brushing, rolling. Suggest spraying, make sure the coating is uniform and even. The temperature of the surface to be sprayed should be -5℃~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.

Shake the container vigorously for 30 seconds before open it. The nanoparticles in it must be dispersed properly before and during spraying. Please clean the spray gun with Butyl acetate 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. Use 200 mesh screen in the roller. Self drying time is 24 hrs or heat 130℃5mins. Surface drying time is 2 hrs, then can move or transport, make it longer in winter.

The 24 hrs self dried coating must continue to dry for over 2 days to reach maximum durability, so suggest testing after 3 days. The 130℃5mins heated coating must continue to dry for over 24 hrs to reach maximum durability, so suggest testing after 1 day. For best long- term performance avoid imposing excessive mechanical friction or other surface treatments.

Substrate cleaning Degreasing 、drying ⇨ Dry surface uniform even spray ⇨ Self drying 24 hrs or Heat 130℃5mins ⇨ Coating Completed

Can use alcohol、Detergent Make sure no residue

Estimated 1L can cover 60 ㎡ substrate

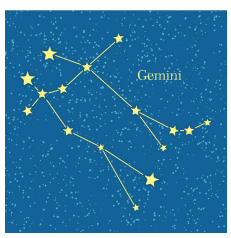
High standards require sandblasting pretreatment

[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 6 months. Finish it all within 1 week after open, or tight seal again from air, it is moisture sensitive.

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



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