

TDS of Multi-functional Sand Texture Materials S-01A

Multi-functional sand texture materials S-01A is R&D by our own company, innovative composite materials which is easy to be operated and could be mastered quickly. S-01A could replace sand texture agent, bentonite, loosing agent, charge enhancing agent, hardening wax and parts of polyester resin. S-01 could improve the quality of powder coatings. Cost could also be adjusted according to performance and property you want to achieve.

All the physical and chemical properties are improved, especially the film hardness could be improved to 3-5H(pencil hardness).

●S-01A + ingredients (resin + curing agent + pigment+ filler) can produce sand texture powder coatings to meet customer's requirements. Other auxiliary materials could also be chosen, because S-01A has good compatibility.

●Adjust the technical parameters of the extruder (recommend to use the screws specialized for sand texture powder coating) or the pigment base ratio of the formula. The melting temperature of the outlet material should not exceed 135 °C. The gloss ($\geq 4\%$ - 40% @ 60°) can be controlled and adjusted to ensure the consistent gloss. The color and gloss are consistent, no obvious difference.

●By adjusting the technical parameters of the mill (ACM) or changing the sieve mesh, it is possible to produce sand texture powder coatings with different particle sizes distribution.

Particle size D50 of standard sand texture powder coatings using S-01A is 15-25 microns, The sand texture surface is clear, uniform texture, three-dimensional, flat, firm, and the corners are well covered and sprayed. The electric field (magnetic field) implements a more reasonable layout method, so that the product charge (corona charge and friction charge) is very stable. The spraying rate is obviously increased, and the recycled powder can be sprayed to achieve better results.

Particle size D50 of super fine sand texture powder coatings using S-01A is 10-20 microns, The sand texture is fine, moist, and good hand feeling. By using S-01A, fine sand texture powder coating has good charge ability, not affect the spraying rate. The thickness of the work piece is no more than 120 microns, there is no powder coating falling, no crater, and no Faraday.

●The sand texture powder coatings manufactured by S-01A, can also be used for tribo gun powder coating. Do not need to add tribo gun agent, no need the tribo gun version polyester resin for tribo gun. One product has two usages.

●With S-01A, users could produce pure polyester , hybrid(epoxy resin and polyester resin) system and flat recycling sand texture powder coating.

Black Sand Texture Powder Coating Reference Formula :

No	Item	Dosage(g)	Dosage(g)	Dosage(g)
1	Polyester resin(93:7)	45	50	55
2	TGIC	3.5	3.9	4.3
3	Tio2 (R818)	1.3	1.4	1.5
4	Precipitated BaSo4 (1250mesh)	42	35	28
5	Sand texture materials(S-01A)	4	6	8
6	Flow agent (588)	1	1	1
7	Precipitated SiO2 (600mesh)	2	1.5	1
8	Carbon black	1.2	1.2	1.2
	Total	100	100	100
	Curing temperature&time	200°C/10min	200°C/10min	200°C/10min
	Gloss@60°	5-7%	5-7%	5-7%

Spray process	Voltage (KV)	Air pressure (Mpa)
Corona charge	45-65	0.10-0.14
Tribo charge	20-35	

Storage and package:

Storage under 35°C, avoid moisture, rain and sunlight, while far away from fire. The storage period is three years. After storage period, it needs to re-examine and sample test. It can continue to use if qualified.

20kg in PP bags or as requirement by customer.