RAYASIL® 121

Technical Data Sheet

RAYASIL 121 is synthetic sodium aluminosilicate produced through controlled precipitation process. It is characterized by its high purity, uniform particle size, and tailored physical properties.

Applications:

Paint and Coatings Industry: -Functions as a matting agent, thixotrope, and thickener. -Titan extender for water-based and oil-based semi-matte and matte paints. -Enhances resistance to rust and corrosion and prevents cracking in traffic paints.	**Plastic and Masterbatch Industry**: -Used as a partial replacement for titanium dioxide. -Producing matting effect in various plastic products. - Acts as an IR absorber agent specially in greenhouse films. - Serves as excellent Anti-blocking agent in films such as PP, PE, PET, PVC, and etc.
Printing Inks Industry: - -Acts as a sharpness regulator, matting agent, and thickener. -Improves the quality and consistency of printing inks.	**Ceramic Industry**: -Functions as a networker and matting agent. -Enhances the quality of ceramic glazes. -Acts as a cost-efficient substitute for titanium dioxide.
Rubber and Tire Industry: -Used as a reinforcement agent to improve wear and rolling resistance. -Preventing scratch and abrasion in rubber applications	**Chemical Industry**: -Serves as an anti-caking and anti-clumping agent in powders. -Particularly effective in humid environments to maintain product flowability.
Paper Industry: -Serves as a whitening and coating agent. -Improves brightness and finish in paper production.	**Animal Feed and Food Industries**: - -Prevents clumping and sticking in powdered and granular food/feed products. -Ensures product consistency and ease of handling.

Physical and Chemical Characteristics

	121 EA P	121 EA G	*Unit*	*Method*
Appearance	powder	granules		
60 Mesh Sieve residue	-	≥75	wt%	
Sieve residue 45 µm	≤ 5	-	wt%	
Average Particle Size (D50)	7	7	µm	Malvern MS 2000
SiO_2 content	80	80	wt%	ISO 3262-19
Na_2SO_4 content	≤ 2	≤ 2	wt%	Internal method
Fe content	≤ 200	≤ 200	ppm	Internal method
Loss on drying	≤5	≤5	wt%	ISO 787-2
Oil Absorption	240	240	gr/100 gr	ISO 787-5
Specific Surface Area (BET)	120	120	m^2/gr	ISO 9277
Temped Density	250	360	g/l	ISO 787-11
Hardness	6-7	6-7	Mohs	
pH 5 wt%	10	10		ISO 787-9
Refractive index	1.48	1.48		
Classification	Inorganic, hydrophilic			
CAS number	1344-00-9			
Sensitivity	Hygroscopic			
Storage	Dry, tight-closed, at a regular temperature			
Solubility	Insoluble in water			
Package	20	25	Kg	

The above given information is based on mean values. The typical properties and chemical analyses are intended as examples and are not to be considered as substitutes for actual testing and analyses in those situations where properties and chemical compositions are critical factors. Sales and supplies will always be according to our general sales conditions.

MSDS available on request

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