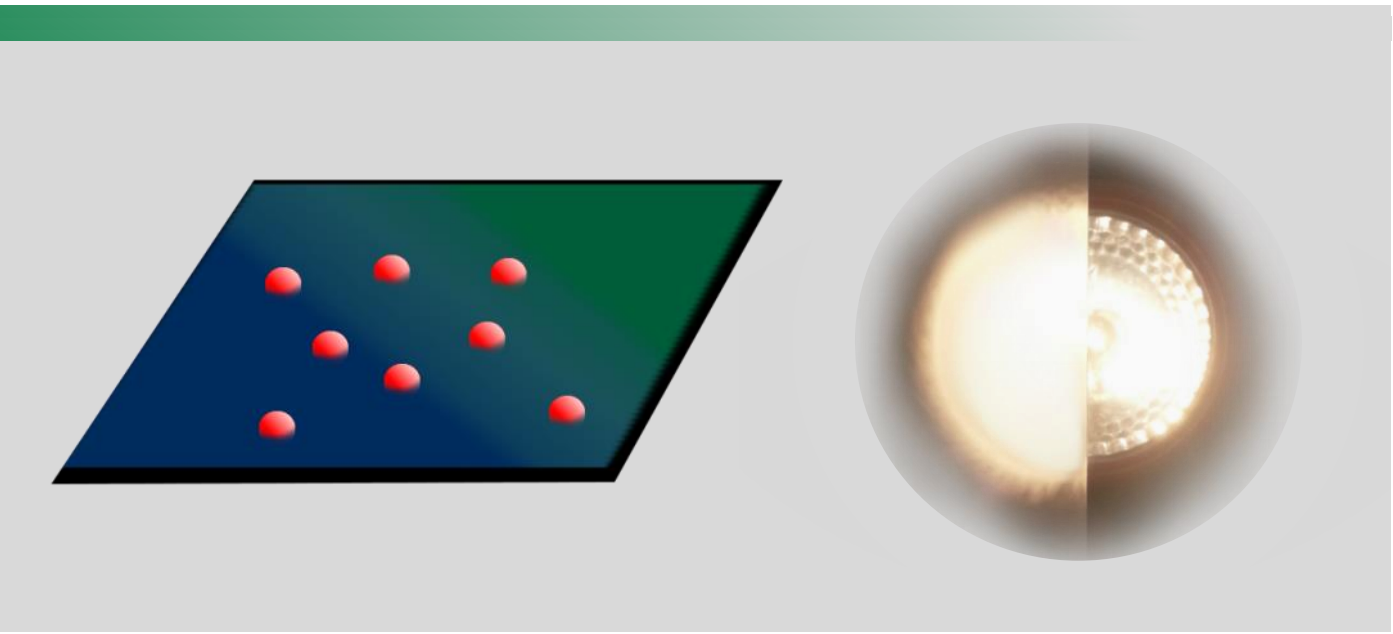
Sylysia

Surface effects in coatings and masterbatch applications

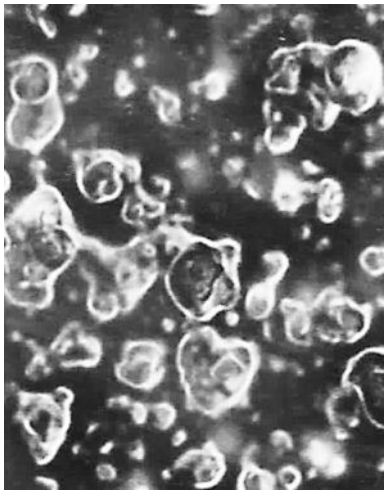


Anti-blocking

Light diffusion

Surface texturing with SYLYSIA silica powders

Sylysia micronized silica powders are used as easy-to-disperse texturing agents for thin film coating applications. The controlled particle sizes and sharp particle size distributions make Sylysia the ideal tool to homogeneously structure surfaces and to enhance surface grip without impairing the surface quality with coarse particles.



Product properties

- Micronized, amorphous silica powders
- Free flowing, white and odorless
- Non-toxic and chemically inert
- Variable particle sizes and pore volumes
- Narrow particle size distributions
- Approved for food contact applications

Loss on drying:	≤ 5%wt.
Specific gravity (SiO_2):	2.15
pH-value:	7±1

SYLYSIA grade	average particle size	pore volume	surface area
	µm	***ml/g***	***m²/g***
SY 290 N/11	11	1.8	300
SY 450 C	10-14	1.2	600
SY 470 L	14-19	1.2	600

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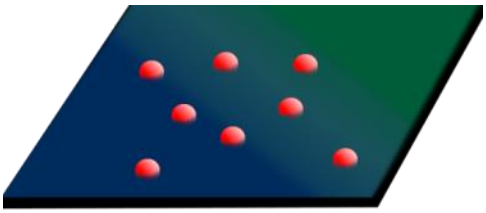
Anti-blocking with SYLYSIA silica powders

Various kinds of plastic films tend do strongly adhere to each other, when rolled or piled (blocking). The addition of Sylysia to the formulation effectively minimizes this problem.



SYLYSIA grade	average particle size	pore volume	surface area
	µm	***ml/g***	***m^2/g***
SY 310 P	2.6	1,6	300
SY 350	3.9	1.6	300
SY 430	4.1	1.2	600
SY 440	6.2	1.2	600

Loss on drying: ≤ 5%wt.
Specific gravity (SiO_2): 2.15
pH-value: 7±1

Application Examples

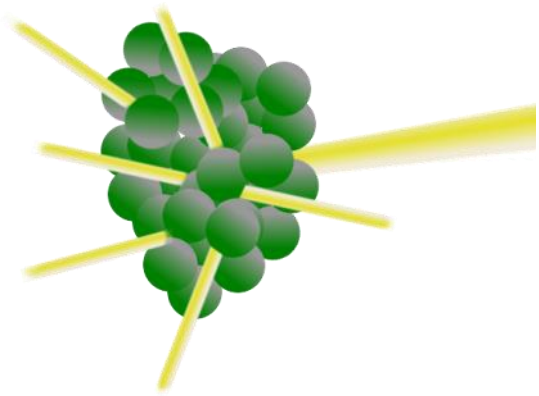
Anti-blocking with SYLYSIA silica powders

- Recommended anti-blocking additives in plastic sheets and foils

SYLYSIA grade	iPP	cPP	oPP	PET	PE	PVC	Nylon	Others
SY 310 P			+	++		+	++	+
SY 350	++	++	++	++	++	+	++	+
SY 430	+	++		++	+		++	+
SY 440	+	+		++	+		++	+

Light diffusion in plastic sheets and foils

With a refractive index of n = 1.46, SYLYSIA silica powders are used as a very
cost-efficient light scattering agent for **PS** and **PC** sheets and foils.



The controlled and variable internal pore structure efficiently increases the achievable degree of diffusion. This makes SYLYSIA suitable for applications, where a high haze is needed.

Product properties

- Micronized, amorphous silica powders
- Free flowing, white and odorless
- SYLYSIA powders are dry, wax-free, temperature stable, chemically inert and thus well suited for the incorporation in masterbatches.
- Variable particle sizes and pore volumes

Loss on drying:	≤ 5%wt.
Specific gravity:	2.15
pH-value:	7

SYLYSIA grade	average particle size	pore volume	surface area
	µm	***ml/g***	***m^2/g***
SY 320	3.3	1,6	300
SY 350	4.0	1.6	300
SY 240 N	5.0	1.8	300

Contact

- Customer-specific requirements need individual solutions.
- We can offer you support and advice for the start of your development work.
- Do you need more information?
  The FINMA team is looking forward to your contact.

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