



Set a higher standard

ADDITIVES FOR PREMIUM PERFORMANCE COATINGS

GRACE

Talent | Technology | Trust™





The clear choice for premium performance

Grace® additives are designed for use in premium performance coatings, consistently exceeding your requirements and the needs of the rapidly evolving coatings industry. Our expertise in material science enables us to produce a wide range of silicas with excellent properties that improve the performance of your coatings.

Grace offers coatings additives in the following key segments:

- Matting agents
- Anti-corrosion pigments
- Moisture scavengers
- Functional additives
- TiO₂ extenders

Our R&D and technical service teams offer you the benefit of their years of experience and wealth of knowledge in the coatings industry and look forward to helping you differentiate your products in the market.



Grace leads the way in providing technologies and services that enable you to produce coatings that meet the toughest consumer and regulatory demands for sustainability, human health, and safety.

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Matting agents:

Remarkably natural matte finishes

Grace is a global leader in high-performance matting agents for the coatings industry. Our amorphous silica matting agents are synthetically engineered and are exceptionally pure. By controlling pore volume, particle size, and surface treatments, we have created a portfolio of matting agents that offer exceptional performance across a broad range of applications.

Matting agents for wood coatings

In order to achieve the desired look and warm feel of natural wood, formulators are driving to lower matting levels in their finishes. However, this can have a negative effect on several critical film performance properties like chemical resistance, clarity, scratch resistance, and burnishing. In order to help achieve these low gloss levels while maintaining good film performance, the use of SYLOID® matting agents is recommended. Grace has a vast selection of SYLOID® matting agents to meet your needs, a selection of these is listed below.



Solvent based wood coatings systems

- **SYLOID® ED silica series (ED 30, ED 40, ED 50):** Special organic treatment for excellent smoothness and efficiency.
- **SYLOID® C silica series (C 906, C 907, C 1007):** High pore volume and special organic treatment for highly efficient performance.

Waterborne coatings systems

- **SYLOID® 7000 silica:** Special organic treatment for excellent smoothness and efficiency.
- **SYLOID® W silica series (W 300, W 500, W 900):** Water in pores for easier dispersion and less dusting. Excellent smoothness and efficiency.

UV or hybrid UV/water coatings systems

- **SYLOID® RAD series (RAD 2005, RAD 2105, RAD 2007):** Special organic treatments to achieve dead mattes (<10GU) with easier dispersion, less dusting, lower viscosity, and better film clarity.



Black Coffee

Red Wine

50% Ethanol

Black Tea

Water

New for waterborne coatings

SYLOID® AQ silica series (AQ 800, AQ 880): An evolution in silica coatings additives with patent-pending technology specifically engineered to achieve low gloss finishes in waterborne coatings systems. SYLOID® AQ silicas impart high chemical resistance, excellent clarity, and good scratch and burnishing resistance to wood coatings that produce natural-looking, deep matte finishes on fine wood furniture, cabinets, and floors. These two AQ silicas can be used alone or in combination to dial in the desired performance of your wood coating.

**Matted with
SYLOID® AQ 880 silica**
Gloss (60°) = 11.5,
Sheen (85°) = 14.6



Matting agents for coil and general industrial coatings

Get smooth, matte finishes for your roofing, ceiling, siding, and appliance applications with SYLOID® coil and general industrial matting agents.



Coil and general industrial

- **SYLOID® MX silica series:** With or without a special organic treatment, SYLOID® MX has excellent matting efficiency. MX series comes in a variety of particle sizes for desired smoothness.
- **SYLOID® C silica series:** High pore volume, untreated, excellent matting efficiency for low gloss systems, excellent dispersibility, good over-grind protection, and good surface appearance.
- **SYLOID® 621 and 622 silica:** Large particle size, medium pore volume, untreated, excellent matting efficiency for thick film systems. Can also be used in anti-skid applications, powder and radiation cure systems.
- **SYLOID® ED silica series:** With or without special organic treatment, excellent matting efficiency. They come in a variety of particle sizes for desired smoothness. Excellent matting performance in general industrial applications like construction machinery, agricultural, and appliances.



Matting agents for architectural coatings

Meeting the highly technical challenges of matting architectural coatings with very low gloss and sheen values can be achieved by using SYLOID® architectural silicas in your formulation. Our SYLOID® silica offerings demonstrate enhanced performance in formulations based on polymer dispersions and emulsions that deliver superior stain and scrub resistance, flow and levelling, burnishing, and smoothness.

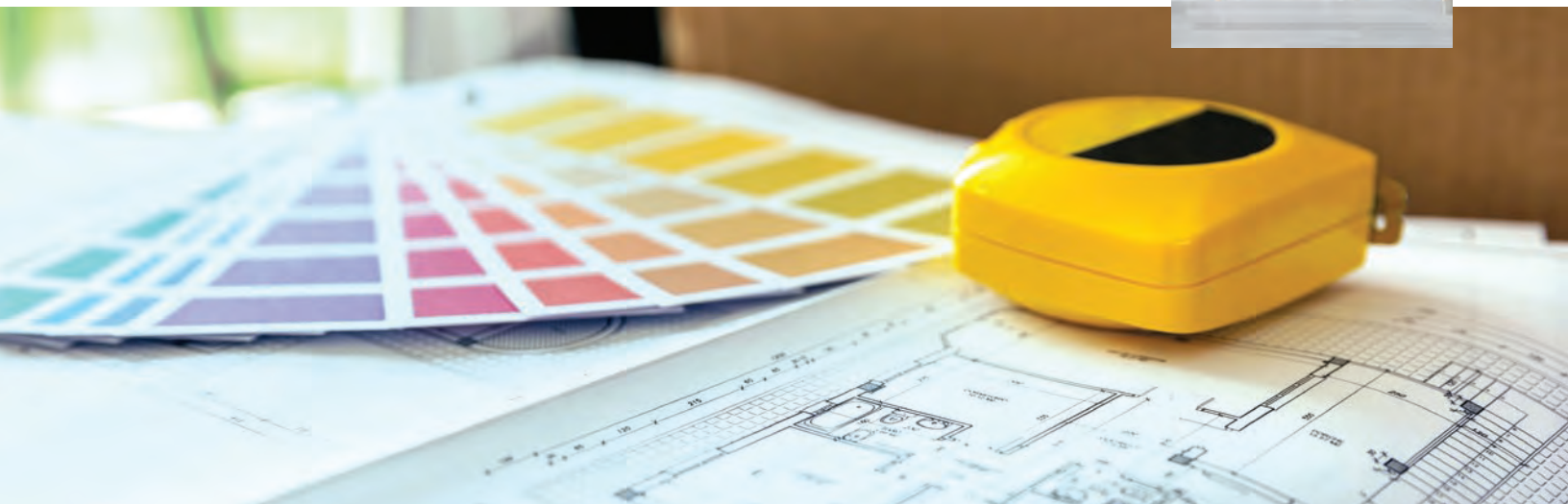
SYLOID® architectural silicas have been extensively tested by a leading independent laboratory and shown to deliver significant performance enhancements versus other silica additives. SYLOID® silicas are safe and easy to use in architectural coatings formulations. They do not contain crystalline silica, which are a major health concern in the industry.

All architectural coatings systems

- **SYLOID® A silica series:** Free-flowing powder with no organic treatment. Excellent matting efficiency, superior stain resistance, burnishing, dirt pick-up, and smoothness. Some products contain water which are not suitable for solvent-based systems, please refer to the product data sheet for more information.
- **SYLOID® 621 and 622 silica:** Large particle size, medium pore volume with no organic treatment. Excellent matting efficiency and dispersibility. Good over-grind protection. Can also be formulated to be used in anti-skid applications, if desired.

Waterborne coatings systems

- **SYLOID® W silica series (W 300, W 500, W 900):** Water in pores for easier dispersion and less dusting. Excellent matting, smoothness, and efficiency. Three particle sizes to choose from (300<500<900).





Anti-corrosion pigments:

Highly effective metal protection

In today's world, it is all about providing superior protection while protecting the environment. SHIELDEX® silicas are designed to achieve both, providing highly effective corrosion inhibitors that meet the strictest environmental standards and requirements. These highly effective corrosion inhibitors are non-toxic, heavy metal-free silica particles with finely controlled particle distribution for smoothness. SHIELDEX® silicas have a lower density which means that you can use half of the amount as compared to conventional anti-corrosive pigments. SHIELDEX® silicas are ideal for coil, automotive, marine, general industrial, and other coatings applications.



Primer and direct-to-metal applications

- **SHIELDEX® AC3 and AC5 silica:** Ion-exchanged silica. Used for superior corrosion protection on exterior building panels with extensive warranties. SHIELDEX® AC3 silica is for systems with DFT <20μ; SHIELDEX® AC5 silica is for systems with DFT >20μ.

Exterior and appliance applications

- **SHIELDEX® C303 silica:** Ion-exchanged silica. Used for superior corrosion protection in both exterior and interior applications.

Interior and exterior applications

- **SHIELDEX® CS311 silica:** Ion-exchanged silica. Used for superior corrosion protection in interior and exterior applications. Optimized curing stability, ideal for acid catalyzed systems.



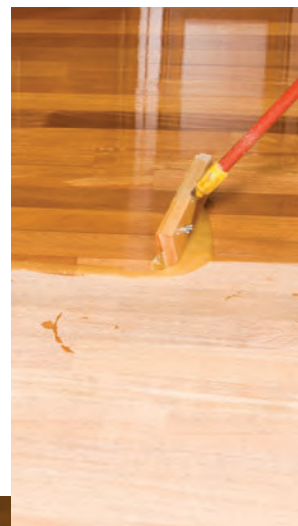
Moisture scavengers:

Uniquely efficient coatings enhancers

SYLOSIV® zeolite powders have exceptional adsorptive capacity at very low moisture levels, which distinguish them from other drying agents and make them the ideal choice for applications in which even the smallest amount of water can be damaging to the coating. Additional advantages of SYLOSIV® zeolite powders include the absence of any side reactions, low sensitivity to temperature, no toxicity, and improved dispersibility.

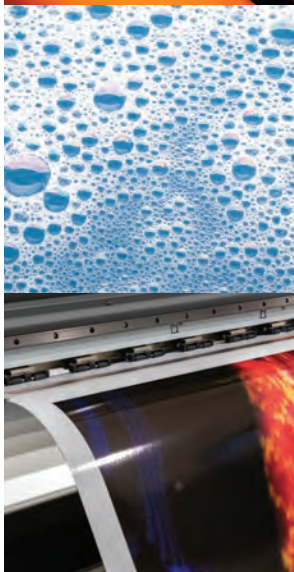
Interior applications

- **SYLOSIV® A3 zeolite powder:** 3Å pore size. Water-specific moisture scavenger for 2K PU systems, moisture-cure PU, and various other systems.
- **SYLOSIV® A4 zeolite powder:** 4Å pore size. Highly effective moisture scavenger for 2K PU and metallic pigments.
- **SYLOSIV® A300 zeolite powder:** 3Å pore size and lower pH. Designed specifically for scavenging moisture for PU systems where extended pot life is required.
- **SYLOSIV® K300:** 3Å pore size. High moisture scavenging capacity. Designed for 2K PU fast curing systems where pot life is not critical.



Functional additives:

Purposefully designed additives



LUDOX® colloidal silicas perform multiple functions in waterborne coatings formulations. Particles in the smaller size range act as binders or co-binders, adding strength and durability to the coating. Larger particle grades serve as surface modifiers. LUDOX® colloidal silicas are used in inkjet coatings, steam and wetting promoters, sealants, ceramics, latex coatings, and adhesives.

LUDOX® colloidal silicas are especially useful in applications requiring chemical inertness and heat resistance in the final product. The particles develop strong adhesive and cohesive bonds and are effective inorganic binders for all types of granular and fibrous materials.

ZEOFOAM™ defoamer precursors facilitate the rapid release of gas bubbles in a fluid. They are hydrophilic silicas designed to be converted into hydrophobic defoamer actives by the addition of a low surface tension additive to the silica. These defoamer actives are then used to formulate defoamers used in a variety of applications. ZEOFOAM™ defoamer precursors are effective, easy to process, and conforms to many FDA standards.

ZEOFLO® defoamers are active (hydrophobic) products pre-treated with silicone and offered as a free-flowing powder used in the production of defoamers.



Titanium dioxide extender:

Incredibly brilliant finishes

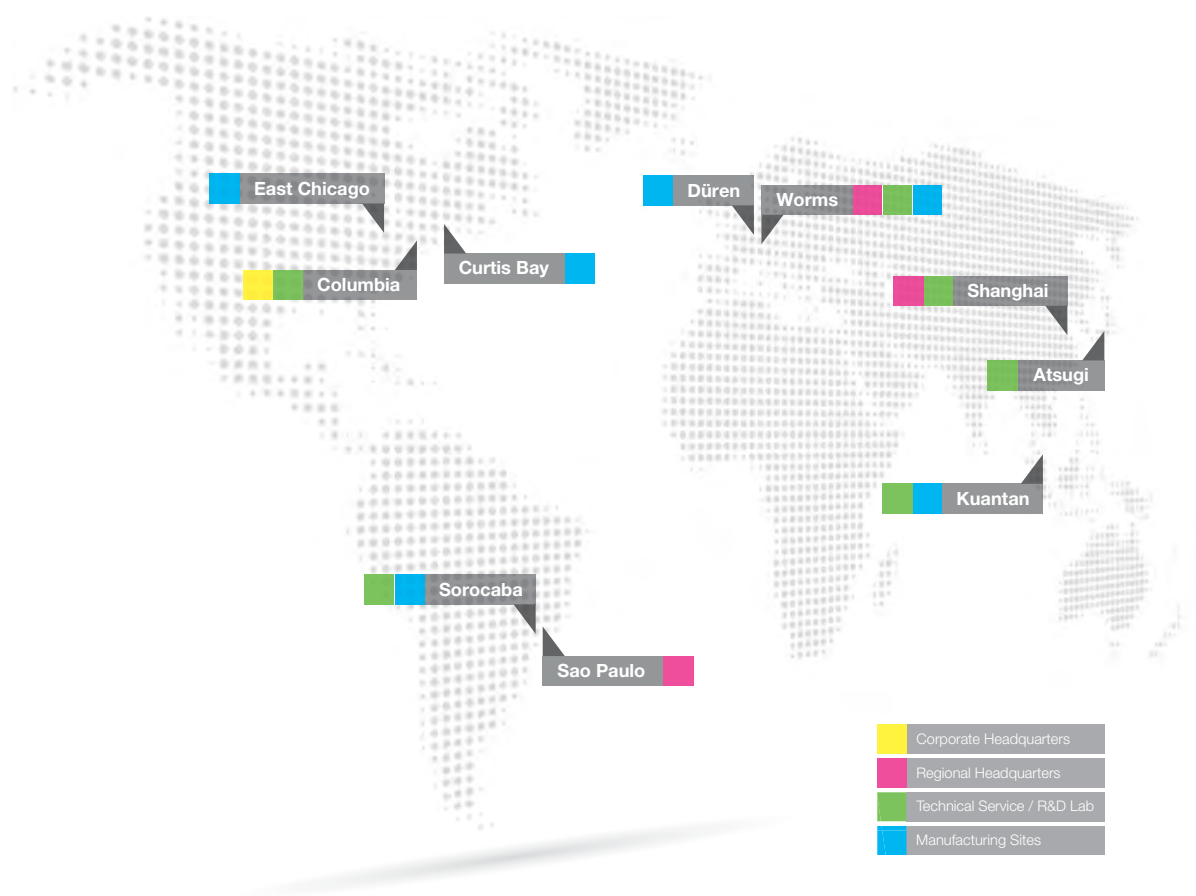
SYLOWHITE® SM 405 titanium dioxide extender is a precipitated amorphous sodium aluminum magnesium silicate with a very fine particle size, appearing as a white free flowing powder. Due to its performance benefits, it is widely used in many different coatings. SYLOWHITE® SM 405 titanium dioxide extender has a high level of purity, which results in minimum effects on color and enhanced brightness properties. Its controlled particle size distribution and pore structure result in an extremely cost-effective titanium dioxide extender.





Demand a higher standard of support and collaboration

You deserve the highest quality in product performance and support. Grace offers an extensive portfolio of premium products, the ability to tailor solutions to meet your needs, and a first-class Technical Customer Service group to support your business now and in the future. If you're looking for a best-in-class partner to help you create premium performance coatings without having to make trade-offs, Grace is the clear choice.



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