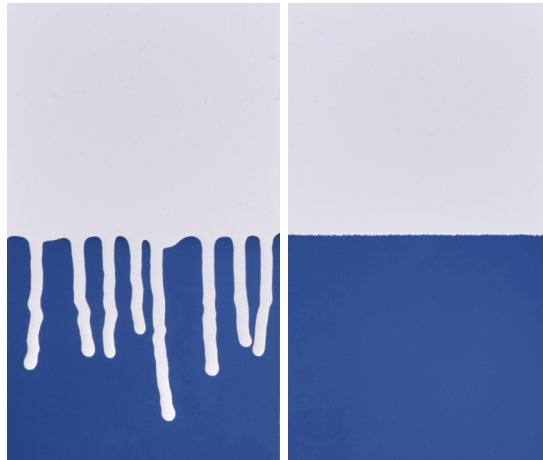


SILICA-BASED RHEOLOGY CONTROL ADDITIVES

AEROSIL® fumed silica

Specialized synthetic amorphous fumed silica to enhance coatings performance



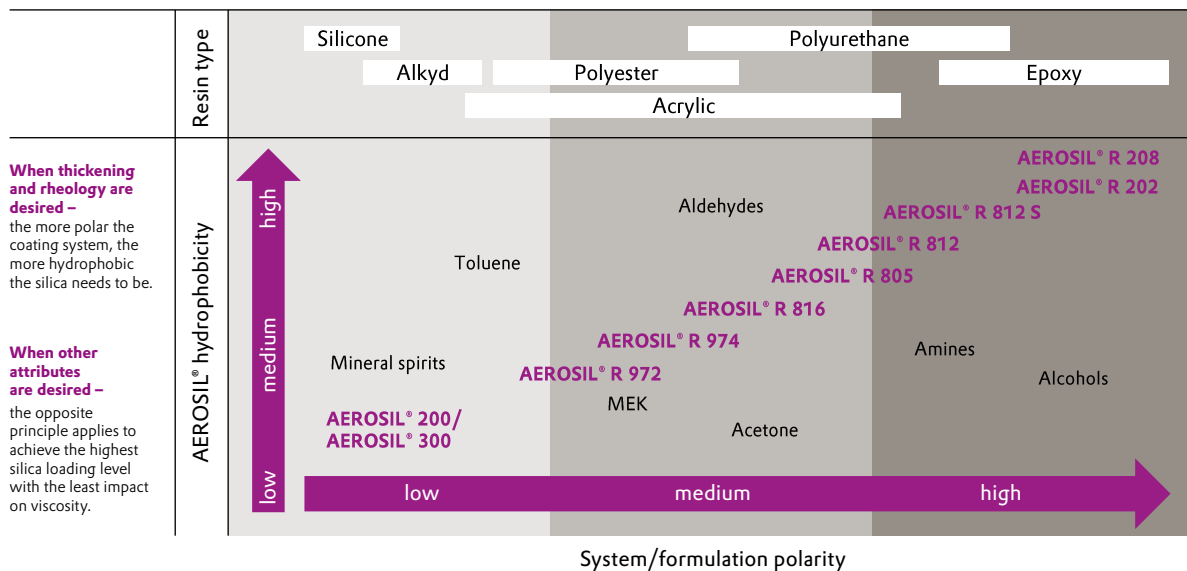
AEROSIL® – At a glance

AEROSIL® fumed silica can be used in coatings to improve rheological performance as well as a variety of other attributes like improved corrosion resistance, reinforcement, and scratch resistance. The AEROSIL® product line offers a wide array of custom tailored products to meet your needs.

AEROSIL® – Improving rheology

Both hydrophilic fumed silica and hydrophobically modified fumed silica can be used to improve rheology. Choosing the correct silica to build rheology depends on the coatings systems overall polarity. The relationship between the hydrophobicity of the silica and the polarity of the system is described in the diagram below indicating which product would be preferred for thickening.

AEROSIL® – Product selector by polarity



i Click here for more information!



AEROSIL® – Fundamentals for enhancing other coatings attributes

AEROSIL® fumed silica can improve a variety of non-rheological attributes in coatings including improved mechanical reinforcement, scratch resistance, and increased hydrophobicity which assists in improving corrosion resistance. Typically the higher the loading level of AEROSIL® used, the more noticeable these attributes can be improved.



Products optimized for water-based coatings

- Ongoing shift from solvent-based to eco friendly coatings systems
- Water-based Industrial coating systems need rheology control agents
- Often used for Industrial water-based spray applications due to excellent anti-sagging properties and chemical resistance

NEW

- AERODISP® WF 7620** – Dispersion based on functionalized AEROSIL® fumed silica – highest rheological efficiency and easy handling properties
- AEROSIL® R 972** – Hydrophobic AEROSIL® fumed silica with general purpose and wide compatibility
- AEROSIL® R 974** – Hydrophobic AEROSIL® fumed silica with general purpose and wide compatibility
- AEROSIL® 200** – Hydrophilic AEROSIL® fumed silica with general purpose and wide compatibility



For increasing hydrophobicity and corrosion resistance

Within the AEROSIL® product line are a variety of hydrophobically modified fumed silica products which can increase a coatings resistance to water and moisture, as well as improve corrosion resistance by enhancing the performance of corrosion inhibiting pigments.

- AEROSIL® R 972** – Hydrophobic AEROSIL® fumed silica with general purpose and wide compatibility
- AEROSIL® R 805** – Highest anti-sagging efficiency in 2K clear coat systems and preferred for silicone oil sensitive systems (e.g. OEM coatings)
- AEROSIL® R 812/
AEROSIL® R 812 S** – High hydrophobic type for any kind of clear coating systems
- AEROSIL® R 202** – Most hydrophobic AEROSIL® fumed silica for systems sensitive to moisture – preferred for maritime & heavy duty protection applications

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