

AEROSIL® R 805

Outstanding rheological efficiency combined with the utmost transparency in 2-Component High Solids Coatings



AEROSIL® R 805 is a hydrophobic fumed silica, surface modified, with octyl-silyl-groups, offering a special surface chemistry. Suitable for conventional and 2-Component High Solids Coatings, e.g. based on acrylic/isocyanate or epoxy/amine

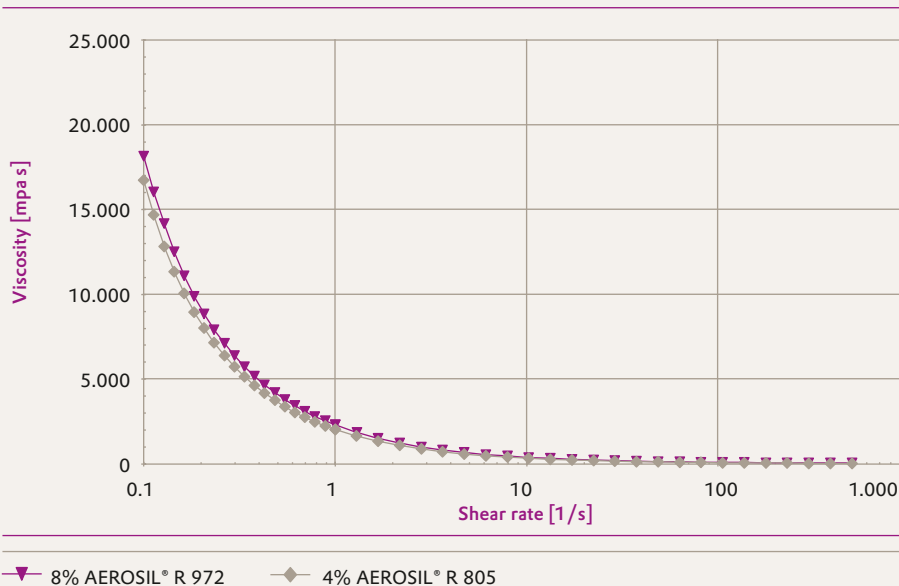
The main function of AEROSIL® R 805 in these coating systems is rheology control, which means improving the anti-sagging behavior.

In pigmented systems, at low shear range, AEROSIL® R 805 additionally works as an anti-settling agent. AEROSIL® R 805 is predestined for brilliant automotive top coats and clear coats, like acrylic/isocyanate coatings. AEROSIL® R 805 is also recommended for anti-corrosion primers due to its hydrophobicity.

Characteristic physico-chemical data

Properties and test methods	Unit	Value
Specific surface area (BET)	m ² /g	125 - 175
pH value in 4% dispersion		3.5 - 5.5
Loss on drying* 2 hours at 105°C	%	≤ 0.5
C content	%	4.5 - 6.5
Tamped density*	g/l	approx. 60
SiO ₂ content based on ignited material	%	≥ 99.8

* ex-plant
 The data represents typical values (no product specification)



8% AEROSIL® R 972



4% AEROSIL® R 805

Only 4% of AEROSIL® R 805 in an acrylic clear coat gives the same viscosity performance as 8% dispersion AEROSIL® R 972. Furthermore the AEROSIL® R 805 dispersion shows a higher transparency than the formulation with AEROSIL® R 972. The outstanding surface chemistry of AEROSIL® R 805, in combination with the right dispersion equipment (zirconia equipped bead mill) are the key parameters in your clear coat formulation.

Acrylic Clear Coat

Improvement of anti-sagging behavior

	Parts by weight	
Acrylate resin	46	48
Butyl acetat	46	48
AEROSIL® R 972	8	–
AEROSIL® R 805	–	4

Dispersion with a zirconia-equipped beadmill (0.5 mm ZrO₂ beads, 3300 rpm)

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