

## Introduction

AL FS-900 is hydrophilic fumed silica surface treated with dimethyldichlorosilane (DMDS) to make it hydrophobic. Fumed silica's unique manufacturing process produces a very high purity type of silica with nano size primary particles, a fluffy white powder that is an amorphous and colloidal form of silica. These characteristics impart a wide range of benefits to formulations from thickening and reinforcement to free flow and anti-settling. In addition the treatment imparts added water repellency, corrosion resistance, as well as thickening of complex liquid systems.

## Typical Physical Properties

Grade	AL FS-900
Form	Fluffy White Powder
Silica (SiO <sub>2</sub> %) Content	>99.8
Carbon Content (wt%)	0.6-1.2
BET specific surface area (m <sup>2</sup> /g)	110±20
Average Primary Particle Size	16 nm
Bulk Density (g/l)	40-60
Heating Loss (105° C for 2 hr)	≤ 1.5%
Loss on Ignition (1000° C for 2 hr)	≤ 0.01%
pH Value (5% in water)	4.0 – 5.0
CAS Number	68611-44-9

## Applications:

- Adhesives and sealants – thickening and reinforcement
- Improves shelf-life of silicone sealants
- Unsaturated polyester resin and gel-coat thickening
- Rheology control in paints, coatings and inks
- Anti-settling for heavy fillers and pigment stabilization

Available in 10 kg bags (10 lb and bulk bags upon special request)