



DATA SHEET
NexSil™ 50ZK-DI

NexSil™ 50ZK-DI Colloidal Silica

NexSil 50ZK-DI is an acidic dispersion of 30nm colloidal silica at 30% SiO₂ concentration in water. The product is based on potassium silicate and has reduced levels of trace impurities such as Fe, Na and Cu, and is chloride-free. The particles are negatively charged and have a high specific surface area.

NexSil 50ZK-DI is formulated for improved stability against gelation in low and mid-pH ranges. The product can be used in a wide variety of applications such as precision polishing, catalysts, or other applications where a small particle size, low sodium colloidal silica is required. In CMP applications, NexSil 50ZK-DI works well as an abrasive for metal CMP slurries such as copper and tungsten slurries.

TYPICAL PROPERTIES

Appearance:	Clear to Translucent Sol
SiO ₂ , %:	30
K ₂ O, %:	< 0.05
Particle Size, Z avg, nm:	40 – 60
Particle Size, from SSA, nm:	25 – 38
Specific Surface Area, m ² /g:	70 – 110
Viscosity, cP:	3 – 15
pH:	2.4 – 3.0
Surface Charge:	Negative

TYPICAL IMPURITIES (AS IS), TOTAL

Na, ppm:	<40
K, ppm:	<500
Fe, ppm:	<40
Cu, ppm:	<0.05
Mg, ppm:	<1
Ca, ppm:	<1
Ni, ppm:	<0.05

FOR ADDITIONAL INFORMATION OR TO PLACE AN ORDER

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