

ROUTINE PRODUCT CONTROLS FOR NALCO POLISHING SLURRIES

Revised 4/26/06

SPECIFICATION	PRODUCT	2329	2350	2354	2358	2360	2371	2398	02TS048
STABILIZING ION		Sodium	Sodium	Sodium	Potassium	Sodium	Ammonia	Ammonia	Potassium
KEY ATTRIBUTES		Large particle colloidal No additives	Improved surface roughness High solids	High removal rate High solids Keep above 50 deg F	High removal rate Lower Cost of Ownership	Broad distribution	Designed for recirculating slurry systems High removal rate	Chelating additive High removal rate	No additives
APPEARANCE			Milky white to beige liquid- turns brown with age.		Milky white to beige liquid- turns brown with age.	Milky white liquid	Milky white to beige liquid- turns brown with age.	Milky white to beige liquid- turns brown with age.	Milky white liquid
PARTICLE DIAMETER (DIAMETER BY LIGHT SCATTERING)		70 - 150 nm	<= 90 nm	45 - 80 nm	70 - 150 nm	<= 120 nm	>= 70 nm	70 - 150 nm	62 - 72 nm
PARTICLE DIAMETER (BY TITRATION)		>= 70 nm	50 - 70 nm	50 - 70 nm	70 - 100 nm	50 - 70 nm	>= 70 nm	70 - 100 nm	>=60 nm
SPECIFIC GRAVITY (@ 25 DEGREES C)		1.282 - 1.294	1.380 - 1.390	1.320 - 1.380	1.170 - 1.200	1.383 - 1.394	1.170 - 1.200	1.177 - 1.193	1.282 - 1.292
% SIO2 (CALCULATED FROM SPECIFIC GRAVITY)		38.4% - 41.8%	49.2% - 50.2%			48.5% - 51.6%			>= 39.4%
VISCOSITY (CPS @ 25 DEGREES C)		15 Max	20 Max	20 Max	10 Max	25 Max	10 Max	1.0 - 6.0	20 Max
pH (@ 25 DEGREES C)		8.2 - 8.6	10.8 - 11.2	11.0 - 13.0	11.4 - 12.4	8.3 - 8.7	11.7 - 12.7	11.5 - 12.1	9.0 - 9.7
CONDUCTANCE (MICROMHOS @ 25 DEGREES C)		4700 Max	5700 Max	4500 - 6500	7000 Max	5500 Max	3800 - 7000	3900 - 4900	4700 Max
CENTRIFUGAL SEDIMENTATION (Shipping Sample)		0.5% Max	0.2% Max	0.2% Max	0.5 % Max	0.1% Max	0.2% Max	0.2% Max.	0.5% Max
ASH SOLIDS @ 800 DEG C								25.5 % - 30%	