



NexSil™ Aqueous Colloidal Silica

NexSil™ aqueous colloidal silica products have been developed for use in a wide range of applications. NexSil products are available with a choice of particle sizes, surface areas and pH.

TYPICAL PROPERTIES:

SODIUM-STABILIZED COLLOIDAL SILICA SERIES

PRODUCT	TYPICAL PARTICLE SIZE, nm	TYPICAL SURFACE AREA, m ² /g	WT% SILICA AS SiO ₂	pH @25°C	SPECIFIC GRAVITY	% Na ₂ O	PARTICLE CHARGE
NexSil 6	6	450	17	10.0	1.11	0.45	Negative
NexSil 8	8	330	30	9.8	1.2	0.45	Negative
NexSil 12	12	227	30	9.3	1.2	0.30	Negative
NexSil 12HS	12	227	40	9.8	1.3	0.40	Negative
NexSil 20	20	135	40	8.9	1.3	0.18	Negative
NexSil 85-40	50	55	40	9.5	1.3	0.20	Negative
NexSil 125-40	85	35	40	9.5	1.3	0.20	Negative

POTASSIUM-STABILIZED COLLOIDAL SILICA SERIES

PRODUCT	TYPICAL PARTICLE SIZE, nm	TYPICAL SURFACE AREA, m ² /g	WT% SILICA AS SiO ₂	pH @25°C	SPECIFIC GRAVITY	% K ₂ O	PARTICLE CHARGE
NexSil 20K-30	20	135	30	9.2	1.2	0.10	Negative
NexSil 85K-40	50	55	40	9.8	1.3	0.30	Negative
NexSil 125K-40	85	35	40	8.9	1.3	0.10	Negative

ACIDIC COLLOIDAL SILICA SERIES

PRODUCT	TYPICAL PARTICLE SIZE, nm	TYPICAL SURFACE AREA, m ² /g	WT% SILICA AS SiO ₂	pH @25°C	SPECIFIC GRAVITY	COUNTER ION	PARTICLE CHARGE
NexSil 20A	20	135	30	2.8	1.2	NA	Slightly Negative
NexSil 35A	35	80	30	2.8	1.2	NA	Slightly Negative
NexSil 85A	50	55	30	2.8	1.2	NA	Slightly Negative
NexSil 125A	85	35	30	2.8	1.2	NA	Slightly Negative

AMMONIA-STABILIZED COLLOIDAL SILICA SERIES

PRODUCT	TYPICAL PARTICLE SIZE, nm	TYPICAL SURFACE AREA, m ² /g	WT% SILICA AS SiO ₂	pH @25°C	SPECIFIC GRAVITY	COUNTER ION	PARTICLE CHARGE
NexSil 20NH ₄	20	135	40	9.8	1.3	NH ₃	Negative
NexSil 85NH ₄	50	55	40	9.8	1.3	NH ₃	Negative
NexSil 125NH ₄	85	35	40	9.8	1.3	NH ₃	Negative

NEXSIL APPLICATIONS:

NexSil colloidal silica was developed to be utilized in a range of applications. These materials may be used in applications related to:

- ♦ Production of vacuum-formed fibrous refractory products.
- ♦ Binder formulations for the production of materials such as granulated powders.
- ♦ Surface modification for anti-slip paper and cardboard coatings.
- ♦ Anti-blocking effects for films and coatings, including steel coatings.
- ♦ Catalyst production.
- ♦ Precision polishing of silicon wafers.
- ♦ Precision polishing of semiconductor substrates.
- ♦ Binder formulations for precision investment casting.

PACKAGING:

NexSil colloidal silica is offered in pails, drums and totes. Container net weights available upon request.

FOR ADDITIONAL INFORMATION OR TO PLACE AN ORDER:

Nyacol Nano Technologies, Inc.
Megunko Road
P.O. Box 349
Ashland, MA 01721-0349 U.S.A.

Telephone: 508-881-2220 Local Area
800-438-7657 Toll-Free
Fax: 508-881-1855
Internet: www.nyacol.com