

- DESCRIPTION** FRITZ NC-S-1 is a cement dispersant that reduces the apparent viscosity and improves the rheological properties of a cement slurry.
- ADVANTAGES**
- NC-S-1 lowers the viscosity of a slurry and reduces the frictional pressure during pumping.
 - The thinning of the cement slurry aids in achieving turbulent flow and mud removal in the annulus of a well.
 - A lower viscosity cementing system can be mixed at a higher density by reducing the mixing water while remaining pumpable.
- APPLICATION**
- NC-S-1 is primarily a dispersant but by reducing the mixing water it improves fluid loss control.
 - It may be used for dispersing any API class of cement (A, C, G or H).
 - It may be used with other cement additives such as fluid loss additives, silica flour, retarders, defoamers and weighting materials.
 - NC-S-1 is not recommended for use in slurries with salt concentrations of 18% bww or greater.
- PROPERTIES**
- Brown Powder
 - Specific Gravity – 1.30
 - Bulk Density – 43 lb./cu. ft..
 - Very water soluble
 - Packaged in 50 lb. bags
 - Water Requirements – none
 - Loading Rate – 0.5 to 1.5% bwc
 - See Rheology Data

The information contained herein is based on data considered accurate with representative samples. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. The above data does not imply specifications for this product. Fritz Industries, Inc. assumes no responsibility for personal injury or property damage to vendees, users or third parties, caused by the material. Such vendees or users assume all risks associated with the use of the material. Consult the Material Safety Data Sheet before using this product.

COMPARATIVE RHEOLOGY DATA FOR FRITZ CEMENT DISPERSANTS

SLURRIES:

Class H Cement
0.75% Dispersant
NaCl
4.3 gal water/sk

Fresh Water

700 grams
5.25 grams
0.0 grams
266 grams

18% Salt

700 grams
5.25 grams
47.9 grams
266 grams

Saturated Salt

700 grams
5.25 grams
98.4 grams
266 grams

Dispersant	Atm. Vis. (Bc)		Rheology (No. 1 Spring)						Atm. Vis. (Bc)		Rheology (No. 1 Spring)						Atm. Vis. (Bc)		Rheology (No. 1 Spring)							
	i	f	600	300	200	100	6	3	i	f	600	300	200	100	6	3	i	f	600	300	200	100	6	3		
	Fresh Water @ 80°F						18% Salt @ 80°F						Saturated Salt @ 80°F													
NC-S-1	1	3	62	24	14	6	5	1	3	4	82	40	27	15	3	3	6	10	144	87	70	49	35	32		
SC-8	5	9	61	24	13	5	1	1	6	9	71	33	21	10	1	1	5	9	95	47	38	16	1	1		
	Fresh Water @ 140°F						18% Salt @ 140°F						Saturated Salt @ 140°F													
NC-S-1	4	7	44	18	10	4	1	1	1	5	70	37	27	18	10	11	1	4	79	44	34	22	13	13		
SC-8	5	10	46	18	11	4	1	1	5	6	55	26	17	9	2	2	5	9	63	29	20	11	2	2		
	Fresh Water @ 180°F						18% Salt @ 180°F						Saturated Salt @ 180°F													
NC-S-1	2	5	41	15	9	3	1	1	4	12	GELLED						4	4	61	33	24	15	8	8		
SC-8	5	9	41	15	9	4	1	1	5	9	50	25	18	11	5	5	6	7	52	25	17	9	3	3		

FRESH WATER THICKENING TIME API Sch. 5G @ 125°F, H:MM

NC-S-1 6:45
SC-8 4:30

The information contained herein is based on data considered accurate with representative samples. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. The above data does not imply specifications for this product. Fritz Industries, Inc. assumes no responsibility for personal injury or property damage to vendees, users or third parties, caused by the material. Such vendees or users assume all risks associated with the use of the material. Consult the Material Safety Data Sheet before using this product.

Corporate Headquarters P.O. Drawer 170040, Dallas, TX 75217
1-800-955-1323 • 1-972-285-5471 • Fax 1-972-270-0179
Visit our website at www.fritzoil.com or e-mail us at oilsales@fritzind.com