FRITZ Industries, Inc.
Oilfield Chemicals

SC-10
Drilling Fluid Thinner/Dispersant

DESCRIPTION

SC-10 is an acrylic polymer used to control the rheological properties of water-based drilling fluids.

ADVANTAGES

- SC-10 is ideally suited for all fresh, salt and KCl water-based fluids.
- It may be used in all low, normal and heavy weight systems.
- SC-10 provides exceptional thermal stability in fluids at temperatures up to 500°F.

APPLICATION

- Typical concentrations to be used are 2-4 pounds per barrel in most fluids to obtain the desired fluid properties.
- SC-10 should interact well with all other drilling fluid additives.

PROPERTIES

- Off-White Powder
- Specific Gravity – 1.35
- pH – neutral
- Packaged in 50 lb. bags
- See Rheology Test Data

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

SC-10 – SALT CONTAMINATED MUD

Salt Contaminated Mud

26 ppb Prehydrated Bentonite	376
Salt (NaCl)	1.75
SC-10	
NaOH (pH adjusted to 9.5)	

Unaged	Additive Loading,	Rheology at (rpm)											
Sample	ppb	600	300	200	100	6	3	AV, cp	PV, cp	YP, lb./100 ft^2	10 sec. gel, lb./100 ft^2	10 min. gel, lb./100 ft^2	API FL, cc
Blank	0	70	62	55	53	48	48	35	8	54	43	58	
SC-10	1	42	33	29	26	21	22	21	9	24	30	82	
SC-10	2	38	28	24	20	15	16	19	10	18	24	63	
SC-10	4	32	23	19	16	11	12	16	9	14	12	32	
SC-10	6	32	22	19	15	9	10	16	10	12	10	27	

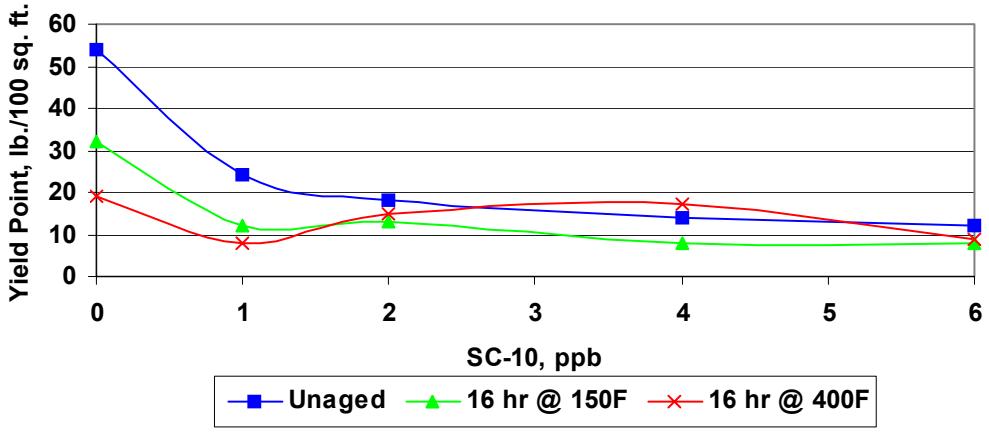
Rolled 16 hr. @ 150°F													
Sample	ppb	600	300	200	100	6	3	AV	PV	YP	10 sec. gel	10 min. gel	API FL
Blank	0	54	43	38	34	30	30	27	11	32	30	90	12.5
SC-10	1	36	24	21	16	11	11	18	12	12	14	37	12
SC-10	2	37	25	21	15	7	7	18.5	12	13	11	40	9.9
SC-10	4	30	19	16	11	4	4	15	11	8	5	15	9.5
SC-10	6	32	20	17	12	5	5	16	12	8	5	12	9.5

Rolled 16 hr. @ 400°F													
Sample	ppb	600	300	200	100	6	3	AV	PV	YP	10 sec. gel	10 min. gel	API FL
Blank	0	57	38	31	21	8	9	28.5	19	19	10	55	13.1
SC-10	1	40	24	18	12	3	3	20	16	8	3	30	12.5
SC-10	2	57	36	27	17	3	3	28.5	21	15	3	4	11
SC-10	4	65	41	31	20	4	3	32.5	24	17	3	4	11
SC-10	6	45	27	20	13	3	3	22.5	18	9	3	5	9.7

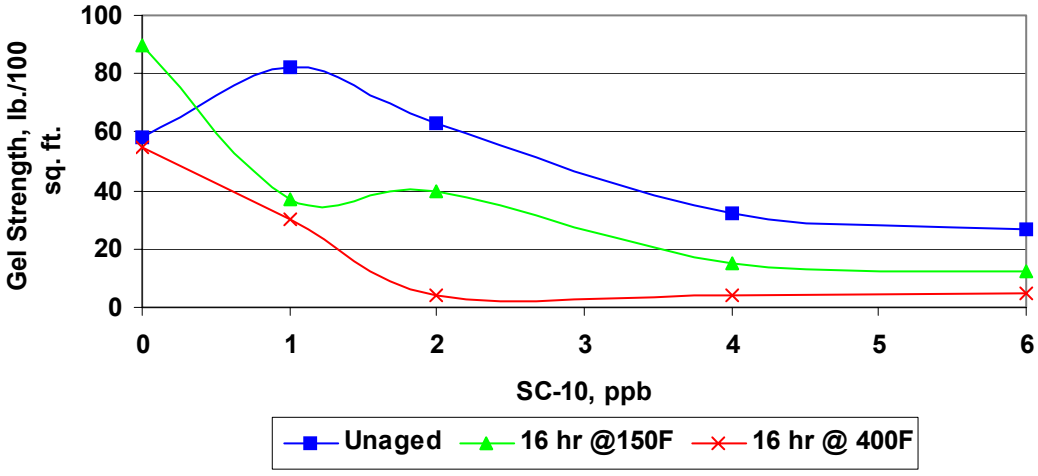
Corporate Headquarters P.O. Drawer 170040, Dallas, TX 75217
1-800-955-1323 • 1-972-285-5471 • Fax 1-972-270-0179
Visit our website at www.fritzoil.com or e-mail us at oilsales@fritzind.com

SC-10
Drilling Fluid Thinner/Dispersant

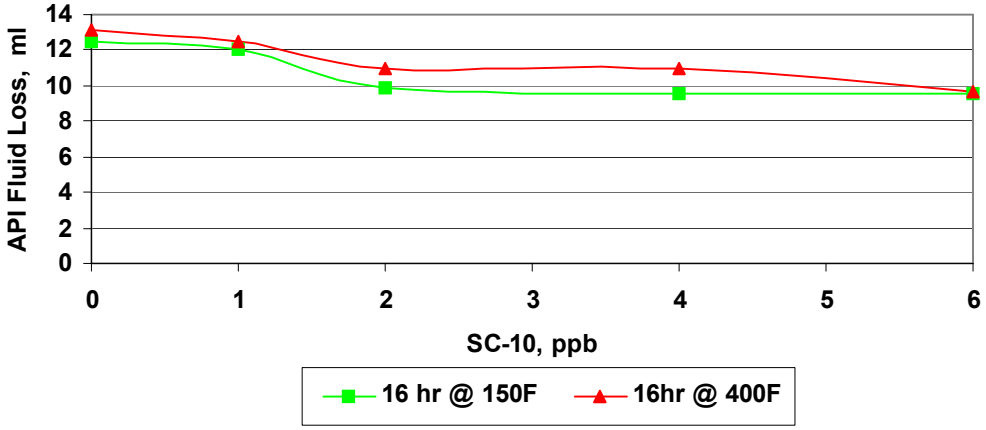
Yield Point in Salt Contaminated Mud



10 Minute Gel Strength in Salt Contaminated Mud



Fluid Loss in Salt Contaminated Mud



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

SC-10 – GYPSUM MUD

Gypsum Mud

26 ppb Prehydrated Bentonite	376
Gypsum	5
Salt (NaCl)	4
SC-10	
NaOH (pH adjusted to 9.5)	

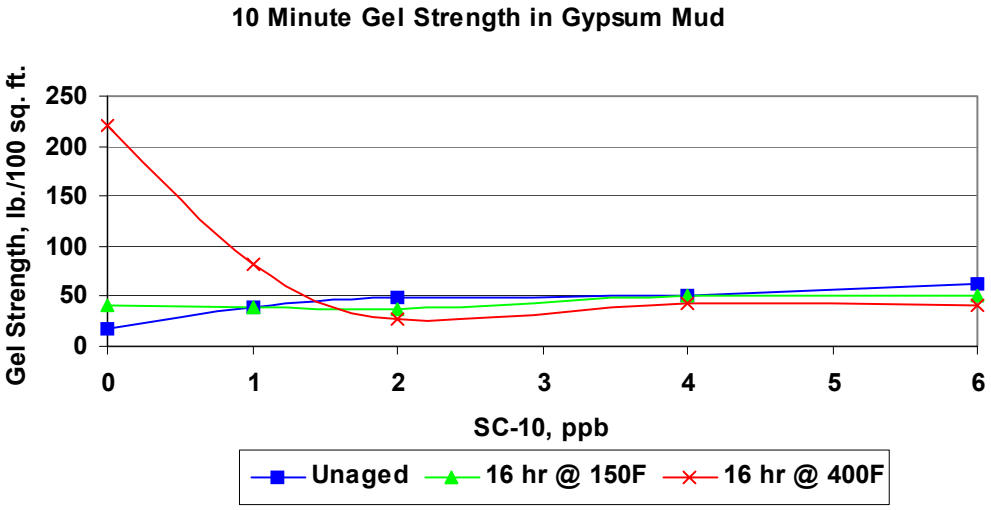
Unaged	Additive Loading,	Rheology at (rpm)											
Sample	ppb	600	300	200	100	6	3	AV, cp	PV, cp	YP, lb./100 ft^2	10 sec. gel, lb./100 ft^2	10 min. gel, lb./100 ft^2	API FL, cc
Blank	0	40	35	32	29	23	23	20	5	30	22	17	
SC-10	1	31	24	22	19	14	15	15.5	7	17	16	39	
SC-10	2	30	24	21	18	14	15	15	6	18	17	48	
SC-10	4	31	24	22	19	14	15	15.5	7	17	17	51	
SC-10	6	33	25	23	19	14	16	16.5	8	17	18	62	

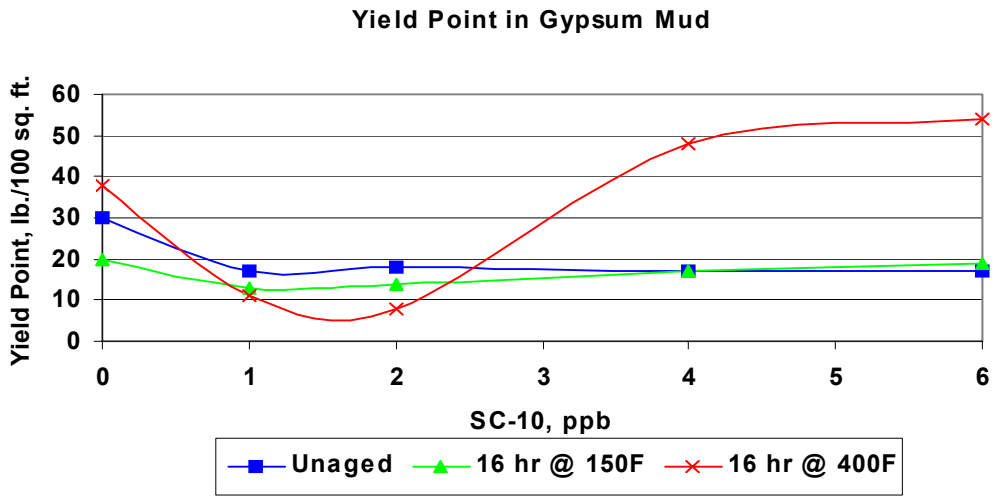
Rolled 16 hr. @ 150°F													
Sample	ppb	600	300	200	100	6	3	AV	PV	YP	10 sec. gel	10 min. gel	API FL
Blank	0	32	26	24	21	17	19	16	6	20	20	41	30
SC-10	1	27	20	18	14	7	6	13.5	7	13	11	40	24
SC-10	2	28	21	19	16	11	11	14	7	14	11	38	20.9
SC-10	4	37	27	24	20	13	13	18.5	10	17	15	50	16.5
SC-10	6	43	31	27	21	13	13	21.5	12	19	14	50	14

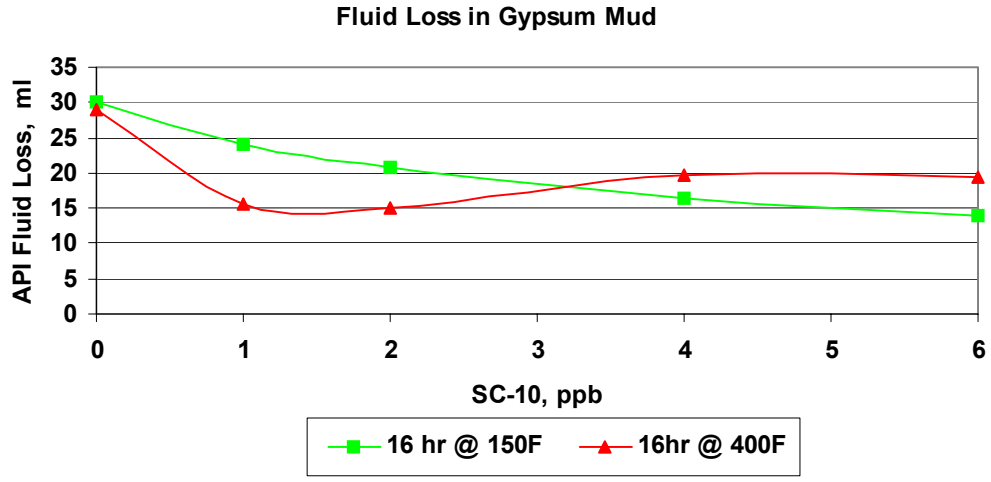
Rolled 16 hr. @ 400°F													
Sample	ppb	600	300	200	100	6	3	AV	PV	YP	10 sec. gel	10 min. gel	API FL
Blank	0	48	43	39	36	40	47	24	5	38	97	220	29
SC-10	1	29	20	18	14	5	6	14.5	9	11	3	82	15.5
SC-10	2	30	19	16	12	3	3	15	11	8	3	27	15
SC-10	4	62	55	48	40	24	24	31	7	48	7	42	19.8
SC-10	6	70	62	53	49	27	27	35	8	54	10	41	19.5

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

SC-10
Drilling Fluid Thinner/Dispersant







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

SC-10

STATIC AGING IN HEAVY WEIGHT BARITE MUD AT 450°F

MUD DESIGN **18.326 lb./gal.**

209.6 ppb Water
10.4 ppb Bentonite
30 ppb Rev. Dust
520 ppb Barite
770 ppb

	RHEOLOGY @ 80°F (rpm)									
BEFORE AGING	**600**	**300**	**200**	**100**	**6**	**3**	**PV, cP**	**YP, lb./100 ft^2**	**10 s/10 min. gel, lb./100 ft^2**	**Shearometer, lb./100 ft^2**
BLANK	253	193	171	137	90	93	60	133	86 / 140	
2 ppb SC-10	204	119	86	51	9	9	85	34	8 / 16	
4 ppb SC-10	243	143	108	66	15	12	100	43	14 / 23	
8 ppb SC-10	240	150	115	73	23	20	90	60	19 / 31	
STATIC AGED @ 450°F FOR 16 HRS										
BLANK	227	148	115	76	24	21	79	69	23 / 41	GELLED
2 ppb SC-10	270	160	117	69	16	13	110	50	12 / 55	298.2
4 ppb SC-10	240	145	105	60	8	7	95	50	6 / 60	260.9

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