

## ROC-CS3

ROC-CS3 is a clay stabilizer designed to minimize formation damage that can occur when treatment fluids interact with clays imbedded in formation. ROC-CS3 is polymer based and can also control migrating fines through agglomeration preventing formation damage and increasing production.

### Properties

Appearance.....	Colorless to amber liquid
Odor.....	Odorless
Solubility.....	Soluble in Water
Specific Gravity .....	10.8 lbs/gal
pH .....	7.5
Freezing Point.....	-40°F
Flash Point (closed cup).....	> 250°F
Typical dosage.....	1.0 – 4.0 gpt

### Advantages

- Minimizes formation damage that can occur from clays and continues to protect the formation as the wells switch from flowback into production.
- Effective at stabilizing both swelling and migrating clays.
- Outperforms 70% choline chloride at the same loadings on both API bentonite and formation cuttings.
- Compatible with anionic systems including slick water and crosslinked fluids
- Can be used in freshwater, brines, or acid systems and will not hinder the performance of corrosion inhibitors



ROC-CS3 has been tested against choline chloride and shown to have superior performance using both standard API Bentonite and formation core. Below are the Capillary Suction Time (CST) results of ROC-CS3 in API bentonite and Pierre shale. A shorter CST times mean less formation damage.

Clay control (2 gpt)	CST time using API Bentonite* (sec)	CST time using Pierre Shale (sec)
None	148	134.9
70% Choline Chloride	14.9	62.8
ROC-CS3	9.9	30.0

\* Contains 83% silica flour and 17% Wyoming Bentonite

### Storage & Handling Notes

- ROC-CS3 can be stored and transferred using containers and lines made up of glass or plastics (PTFE, PVC, PE).
- As long as it is stored in tightly sealed packaging ROC-CS3 will have a shelf life of two years.
- ROC-CS3 can be thawed after solidifying without impacting its effectiveness.
- In case of contact with the eye, rinse eyes with plenty of lukewarm water. Pursue medical attention if irritation develops.
- If ingested, seek medical attention. Do not induce vomiting unless advised to do so by a qualified medical professional.
- In case of contact with the skin, wash immediately with plenty of soap and water. Remove contaminated clothes and shoes and clean thoroughly before putting them back on. Seek medical attention if experience skin irritation.
- Refer to the Safety Data Sheet for more detailed information

To order **Products** please contact Andrew Romocki at 647-208-3987