

Technical Data Sheet

ICC-Weighting Agent (Completion fluid)

Completion fluid solution is used during work-over and completion operations to provide a clear brine fluids at a density up to 14.2 lb/gal. It provides inhibition, preventing hydration and migration of swelling clays, and can be used for packer fluids or to adjust the density of other brine system.

We provide innovative, highly effective alternative to traditional calcium bromide high density completion fluids with the following modes of action:

Completion fluid is a new innovative, high-density solids-free, completion fluid.

Completion fluid Bromine-free completion fluid is the clear solution to the industry's quest for an environmentally friendly, cost effective alternative to traditional calcium bromide high density completion fluids.

Completion fluid is a high density (14.2 lb/gal, 1.7 gr/ml), solids free fluid that can provide an alternative to calcium bromide brines.

Completion fluid was designed for use in well completion and work-over operations.

Typical Physical Properties

CHARACTERISTIC	STANDARD	Test Method
Physical appearance	Colorless to yellow, clear liquid	
pH (100% solution)	5-6	ASTM D-1172
Sp.Gr @25 °C (g/ml)	1.7	ASTM D-1298
Weight Per Gallon (lbs.)	14.2	
Pour Point (°C)	< -5	ASTM D-97
Solubility in Water	Completely soluble	

Application Information

Completion fluid Solution is used as clear brine fluid for oil field drilling and completion, cement additive.

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Completion fluid is formulated, predominantly using brines and a complex, proprietary blend of additives, which achieves high density completion fluids.



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Features

- Can be formulated to a density of up to 1.7 g/ml (efforts are underway to extend the limits).
- Exhibits significantly lower crystallization temperatures than equivalent-density calcium bromide brines.
- Stable at elevated temperatures and during storage.
- Clear-brine Work-Over and Completion Fluids
- Can be mixed with standard mixing equipment.
- Compatible with down hole elastomers and metallurgies and poses low-corrosion risk.
- Exhibits compatibility similar to that of calcium bromide with other working and reservoir fluids.
- Formulated from renewable products, ensuring continuity of supply.
- Can be formulated as a low-solids reservoir drill-in fluid.
- Performs at low temperatures and high pressures without crystallization.
- Benefits
- Bromine-free, hence does not have bromine corrosion.
- Can be reclaimed for reuse, using standard technology.
- Neutral in pH, and compounds thereby posing low health and safety risks to rig site and plant
- Personnel.
- Significantly lower unit cost than alternative fluid chemistries.
- Requires no special mixing, handling, or storage equipment at the rig site.
- Environmentally friendly.
- Formulated from renewable products, ensuring availability of supply.
- Poses low health and safety risks to rig site and plant personnel

Packaging and Storage

Completion fluid store in corrosion resistant containers and keep closed and firmly sealed. It is concentrated hygroscopic salt solution which will absorb water from the air, reducing density if not properly stored.

This product should not be exposed to direct sun light during storage.

Completion fluid is packaged in 340 kg net wt. (750 lb. net wt.) polyethylene or steel drum.



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Shelf Life

Completion fluid has shelf life of at least one years from the data of manufacture when stored in the original sealed containers in a cool and dry place.

Safety and Handling

Completion fluid poses similar HSE risks to calcium bromide brine. Avoid skin and eye contact, inhalation or ingestion. For skin contact, wash with soap and large quantities of water. For eye contact, flush with large quantities of water for a minimum of 15 minutes; seek medical attention. Use a properly designed respirator if adequate ventilation is not available.