

# MAX-BRINE IF completion fluid

Improve fluid compatibilities  
while protecting your formation  
with a multifunctional, intelligent  
completion brine

In several producing regions worldwide, conventional completion brines can cause serious flow assurance challenges in heavy and light crude oils alike.

Crude oil can create emulsions with mono- and divalent brines, which add to the cost and complexity of treating produced fluids at the surface.

And downhole, conventional brines create a host of formation and production challenges, including:

- Emulsions that lead to formation damage.
- Scale precipitation in the near wellbore when completion brines mix with formation water.
- Wettability changes in the near-wellbore region caused by interactions between surfactants in the completion fluid, the rock, and organic precipitates.

Left unchecked, these challenges severely curtail oil and gas production rates and drive up the cost of future well interventions. Additional treatments at bottomhole conditions, which include expensive equipment and remedial treatments, are often costly and complicated—and offer no guarantee that the well will reach its full production potential.

The Baker Hughes MAX-BRINE™ IF completion fluid offers a versatile, field-tested alternative to traditional completion brines. A new generation of multifunctional, “intelligent completion brines,” MAX-BRINE IF is a proprietary Baker Hughes chemistry that is customizable for specific reservoir fluids and formations.

As part of a completion fluid package, the multifunctional MAX-BRINE IF improves fluid compatibilities to help operators optimize performance in several ways.

## Prevent formation damage

The MAX-BRINE IF formulation is customized to the properties and composition of a given formation’s fluids, mineralogy, bottomhole conditions, and other parameters. As a result, the intelligent completion brine helps prevent formation damage related to emulsions, scales, and fines migration. In addition, the non-emulsifier in MAX-BRINE IF helps reduce interfacial tension and capillary effects, keeping the rock’s wettability water wet to improve production rates.

## Applications

- Operations requiring fluid solutions that optimize flow assurance
- Wells with a risk of near-wellbore formation damage due to fluid-fluid incompatibilities and fluid-rock interactions caused by conventional brines

## Benefits

- Minimizes formation damage while optimizing flow assurance
- Offers a customized completion fluid according to specific reservoir fluids, mineralogy, pressure, and temperature

## Avoid frequent future interventions

MAX-BRINE IF's ability to improve fluid compatibility and avoid near-wellbore blockages makes it an effective intervention prevention solution in both producers and injectors. The brine helps maintain oil production rates and optimize pump rates in injection wells. And by extending the time between well cleanup and stimulation, MAX-BRINE IF helps operators significantly lower their intervention spend.

## Reduce field costs and footprint

MAX-BRINE IF is compatible with fluids used for other stages of the well's lifecycle, including drill-in fluids, wellbore cleanup pills, and enhanced filter cake breakers. This compatibility improves flow assurance while transitioning from drilling to completions to production, thus lowering the costs, footprint, and labor of fluid management in the field.

Contact Baker Hughes to discuss how the MAX-BRINE IF completion fluid can protect your formations while optimizing production rates.

## Typical components of MAX-BRINE IF system

Product name	Description
KLARO™ NE	Non-emulsifier for reservoir stimulation, interfacial tension reduction, and emulsion prevention
KLARO™ SI	Scale inhibitor to prevent scale formation in injection and production wells
KLARO™ FS	Fines stabilizer to minimize production decline due to mobile siliceous fines

Please refer to the product data sheets for additional information on each system component.