

Kraton Synthetic Suspension Additives

Bringing Stability to an Ever-changing World!™

Kraton synthetic suspension additives enable oilfield customers to achieve differentiated performance at competitive formulation costs compared to alternatives. The product allows for higher concentrated fluids through excellent suspension performance, which can lead to as much as 30 percent cost savings from reduced logistics and water consumption.

Kraton offers a wide range of synthetic suspension additives to fit your operational needs. The additives are versatile and compatible with a wide range of materials. Kraton's suspension products are all classified as *non-hazardous and are compatible with a broad range of base oils, including many benzene, toluene, ethylbenzene and xylene (BTEX) free oils.

Kraton synthetic suspension additives have been used in more than 24 billion gallons of finished fluids pumped in hydraulic fracturing operations throughout all major US basins.

*Kraton suspension additives do not meet criteria for classification under GHS.

Key Advantages

Longer Suspension Duration

Excellent Temperature Stability

***Non-hazardous Material**

**Guar, Xanthan, FR and
HVFR Compatible**

**Broad Base Oil Compatibility
(BTEX Free)**

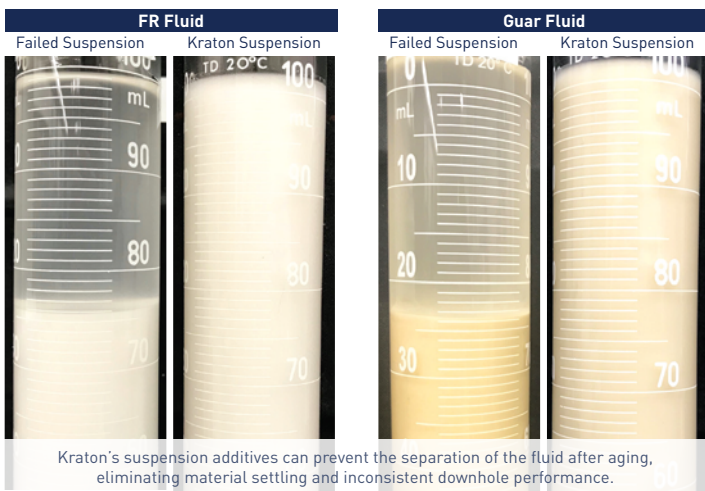


Kraton's suspension additives enable consistent fluids from plant to well site. Pictured: 4ppg Anionic FR Fluid with Kraton.

Suspension Performance

Kraton synthetic suspension additives provide better carrying capacity of the active ingredients in finished products, such as guar, xanthan, friction reducer (FR) and high viscosity friction reducer (HVFR). The additives also deliver excellent stability in a wide range of environmental conditions.

Our newest product offering, Kraton™ MD8705, is specially designed with the stimulation market in mind. It provides an ideal mix of operational flexibility, broad base oil compatibility and suspension stability – all of which makes it the optimal choice for product formulators in the oilfield industry.



Kraton's suspension additives can prevent the separation of the fluid after aging, eliminating material settling and inconsistent downhole performance.

Synthetic Suspension Additive Product Line

Product	Suspension Temperature Range	Suspension Duration	*Free Oil Percentage	Typical Processing Temperature
New Kraton MD8702	-40 up to 120°F	>/=60 days	0%	Ambient
Kraton MD8703	-40 up to 250°F	>/=60 days	0%	Elevated
New Kraton MD8705	-40 up to 150°F	>/=60 days	0%	Ambient

*Zero percent free oil indicates no visible oil layer



Kraton's dry suspension additive products have excellent color and free flowing properties.

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