



APPLICATION INFORMATION **POWERFUL PARAFFIN INHIBITORS**



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New wax inhibitors for optimal flow assurance in extreme conditions and highly paraffinic crude.

BYK-GO 8710 and BYK-GO 8711 are multifunctional liquid paraffin solutions for crude oil and condensate applications to lower the overall pour point of the system by keeping paraffin crystals dispersed. Both are very effective in minimizing paraffin deposition.

BYK-GO 8710 is used to treat a wide range of crude oils while maintaining high activity with a low pour point for easy handling/pumping, especially in extreme cold.

BYK-GO 8711 is customized to perform well in crudes with a very high wax content, allowing for continual operation.

Note

To ensure the best appearance and full functionality, please open in Adobe Acrobat.

Novel solutions to persistent problems

BYK-GO 8710 and BYK-GO 8711 are based on hyperbranched polymers functionalized with a dense hydrocarbon shell that interacts with the paraffin. The patented technology has been customized for better handling properties and target respective paraffins based on the length and density of the hydrocarbon modification.

Comparison

Well condition without inhibitors

Paraffin deposition

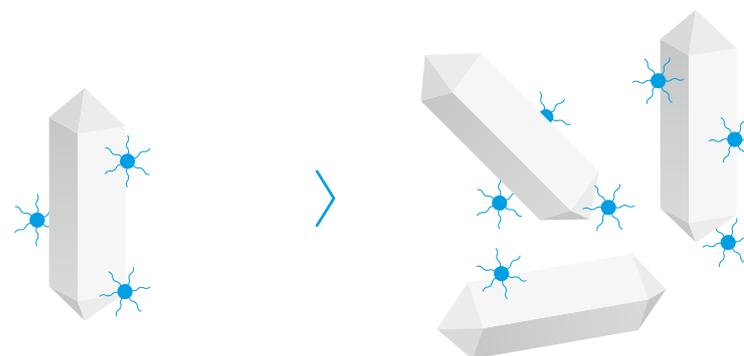


Paraffin crystals form when temperatures drop below the wax appearance temperature of the crude oil.

Crystals agglomerate, creating deposition and restricting flow throughout the crude oil life cycle.

With BYK paraffin inhibitors

Optimized flow assurance



The unique structure interacts with the paraffin crystals.

Crude oil flows free of agglomeration and deposition.

Wax inhibitor physical properties

Products	Active substance (%)	Pour point (°C)	20% active in xylene pour point (°C)
BYK-GO 8710	52	-6	< -27
BYK-GO 8711	52	9	-9
Benchmark 1	37	24	15
Benchmark 2	50	21	0
Benchmark 3	45	24	9
Benchmark 4	50	30	-6

T.01



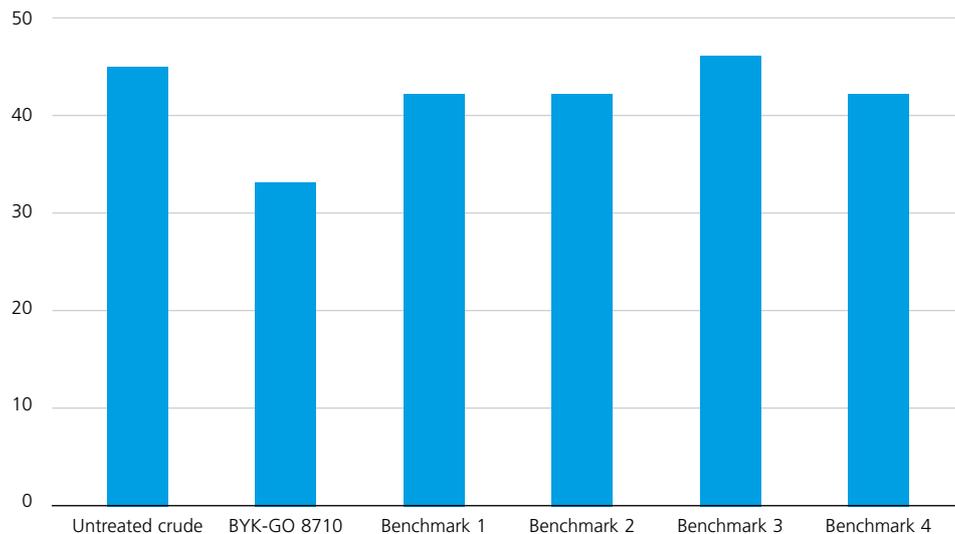
Performance in challenging conditions

BYK-GO 8710 allows crude oil to be produced in seasonal weather with less downtime. This results in higher crude production and therefore more revenue.

Graph G.03 depicts the results of a crude oil that would be solid at ambient temperature, meaning the operator would be unable to produce or sell it. Only BYK-GO 8711 was able to treat this highly paraffinic crude oil, allowing free crude oil production and minimal deposition.

Pour point depressant

Pour point test results (°C)

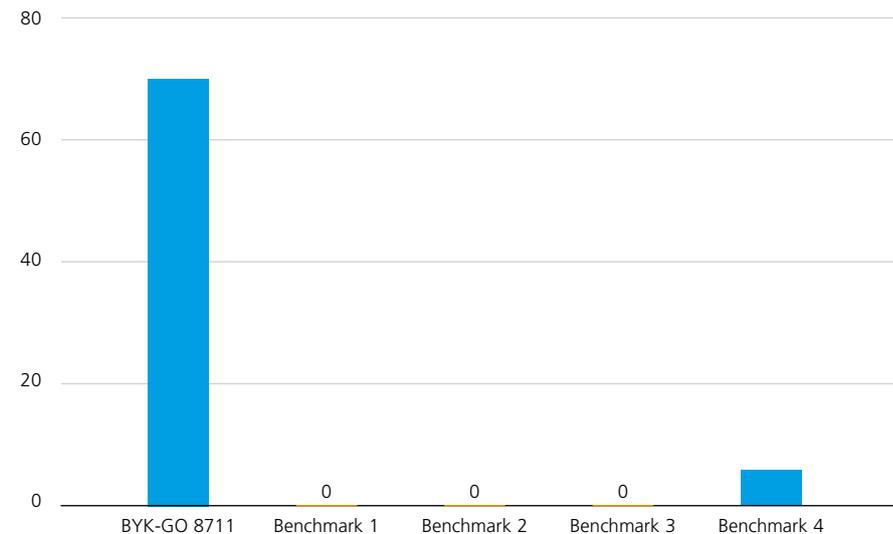


All products are dosed at 50 ppm active substance.
Synthetic crude oil properties: pour point 45 °C, WAT 54 °C, wax content weight 15%.

G.02

Paraffin deposition inhibition

Cold finger test results (% inhibition)



Temperature gradient at 56 °C and 39 °C for 2 hours. All products are dosed at 100 ppm active substance. Synthetic crude oil properties: Pour point 45 °C, WAT 54 °C, wax content weight 15%.

G.03

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This issue replaces all previous versions.

