

# CHEMICAL SOLUTIONS FOR OIL & GAS INDUSTRY



**Brainy Chemicals LLC**

SUPERIOR PERFORMANCE



## **Elevating Performance in Oil & Gas Across the Americas and the Middle East**

For over 13 years, Brainy Chemicals LLC and our parent company, Brainy SAS, have led the way in innovative chemical solutions for the Oil and Gas industry.

With a solid presence across Latin America and a strategic focus on growth in North America and the Middle East, we are committed to driving innovation, efficiency, and performance in every application.

Our commitment extends beyond results; it includes the safety of people and the protection of the environment.

Through eco-friendly formulations, we deliver sustainable solutions aligned with global standards. At Brainy Chemicals, excellence isn't just a goal it's our foundation.





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# Lab-to-Field Synergy

## Delivering What Operations Demand



At Brains Chemicals, we're consistently committed to delivering high-performance products with distinctive attributes tailored to the evolving challenges of the Oil and Gas industry.

This unwavering focus is made possible by the seamless collaboration between our laboratory scientists and experienced field professionals.

By integrating scientific precision with real-world operational insight, we engineer solutions that not only overcome complex technical challenges but also fulfill client expectations, enhance field performance, and generate measurable value across operations.



# Innovative Solutions for Industry Challenges



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# Innovative Solutions for Industry Challenges

Our portfolio tackles the most pressing Oil and Gas challenges, integrating cutting-edge technologies with deep industry expertise to maximize efficiency, profitability, and sustainability.

Additionally, we offer tailor-made formulations that provide enhanced value and performance to our clients.

Function	Primary Focus	Solutions
Well Performance Enhancers	Maximizing the performance and profitability of producer and injector wells and elevating long-term hydrocarbon recovery and productivity.	<ul style="list-style-type: none"><li>· Nanofluids</li><li>· Biotechnologies</li><li>· DB: Dual Benefit Solutions <sup>(1)</sup></li><li>· Hydrocarbon Mobility Enhancers</li><li>· Relative Permeability Modifiers (RPMs)</li></ul>
Well Stimulation & Remedial Fluid System Solutions	Enhancing effectiveness, profitability and environmental footprint of stimulation and remedial well treatments.	<ul style="list-style-type: none"><li>· Performance Enhancers for Acid Treatments</li><li>· Substitutes for Acid Treating Systems</li><li>· Performance Enhancers for Organic Solvents</li><li>· Substitutes for Organic Solvents</li><li>· Superior Performance <b>Chelating Agents</b></li><li>· Pre-Job Tubular Cleaners and Protectors</li><li>· Innovative Diversion Agents</li><li>· Surfactants</li><li>· Iron Sulfide Cleaner</li><li>· Friction - Drag Reducers</li><li>· Fracturing Fluid Enhancers</li></ul>
Intelligent Water Management, Conformance Control & Sustainable Reuse	Delivering value at every stage of the water management cycle in oil and gas operations. From reducing undesired water production and its related problems to enabling reuse of produced water.	<ul style="list-style-type: none"><li>· RPMs for Carbonates</li><li>· RPMs for Sandstones</li><li>· DB: Dual Benefit Solutions <sup>(1)</sup></li><li>· Water Injection Enhancers</li><li>· "Schmo" removers</li><li>· Produced-Water Reuse Enablers</li></ul>
Flow Assurance, Corrosion and Integrity Management	Integrated strategies to prevent flow disruptions, mitigate corrosion, and extend the operational lifespan of oil and gas infrastructure.	<ul style="list-style-type: none"><li>· Scale Inhibitors and Dissolvers</li><li>· Corrosion-resistant Fluid Systems</li><li>· Paraffin Inhibitors and Dispersants</li><li>· Asphaltenes Inhibitors and Dispersants</li><li>· Superior Iron Control Additives</li><li>· Corrosion Inhibitors</li></ul>
Drilling & Completion Solutions	Proven chemical solutions for wellbore stability, fine stabilization, enhanced iron control in drilling and completion fluids.	<ul style="list-style-type: none"><li>· Completion Brines</li><li>· Shale Inhibition Additives</li></ul>

(1) DB: Dual-Benefit Solutions are designed to enhance hydrocarbon production and reduce produced water in a single application.



# One Portfolio. One Purpose. Two Pathways.

In today's energy landscape, success isn't just about doing more, it's about doing it better. That's why every product in our portfolio is engineered as a performance booster, purpose-built to elevate job results and operational efficiency.

## As Performance Boosters. Within Proven Fluid Systems

Innovation doesn't always mean starting from scratch. Often, it's about making what already works—work better. From legacy treatments to advanced fluid blends, our specialty additives are built to seamlessly integrate into traditional chemical systems like acid-based fluids. They improve kinetics, boost stability, enhance corrosion control, and optimize performance across even the most challenging environments.

Take for example, our non-acid pickling system. It efficiently removes iron oxides, iron sulfides, and other scale deposits from tubulars prior to chemical treatment. In addition to delivering robust iron removal, it forms a protective barrier that reduces corrosion, often reducing the requirement for separate corrosion inhibitors. By avoiding acid-based cleaners, it also eliminates common safety hazards, operational concerns, and excessive costs related to fluid handling and disposal. From pre-job mixing to spent fluid management, this multifunctional system streamlines operations and generates measurable cost savings.

## As Standalone Solution. When Substitution Enhances

While every product in our portfolio enhances existing systems, several are engineered to fully replace complex, multi-component treatments. These standalone solutions are complete, logistics-friendly, deployment-ready, and technically robust. Whether resolving outdated iron control blends or replacing fragmented stimulation designs, they simplify workflows while elevating results.

As an example, our high-performance chelating agents not only enhance HCl systems by improving efficiency and reducing additive load but also act as dependable standalone substitutes for HCl in carbonate stimulation. Their controlled reactivity, low corrosion potential, and deeper stimulation capacity make them ideal for worm-hole creations even in high-temperature, H<sub>2</sub>S-rich, or environmentally sensitive environments—streamlining operations, reducing risk, enhancing safety and job benefits.



Whether you're optimizing a trusted formulation or initiating a strategic overhaul, our portfolio delivers benefits—on your terms—with the flexibility, reliability, and performance you expect **Let's unlock your next level of performance—together.**

# Comprehensive Value Across Every Application

Our portfolio of chemical specialties is engineered not only to solve individual pain points but to deliver a spectrum of benefits—from enhanced efficiency and reduced environmental impact to improved asset longevity and application simplicity. Each formulation is guided by a holistic approach, ensuring measurable value across operational, environmental, and economic dimensions.

<b>Maximized Performance at Lower Concentrations</b>	Our formulations provide exceptional, long-lasting efficacy with reduced dosage requirements, enabling cost savings and a minimized logistical footprint.
<b>Multi-Functionality in a Single Product</b>	By addressing multiple operational needs within a single solution, we optimize workflows, reduce chemical inventory, and simplify application processes.
<b>Enhanced Sustainability Through Innovation</b>	We replace traditional fluid systems and additives with safer, environmentally responsible alternatives, actively supporting global sustainability goals.
<b>Asset Integrity and Operational Continuity</b>	Designed to preserve wells and infrastructure, our chemicals extend asset lifespan and minimize operational downtime.
<b>Minimizing Unintended Side Effects</b>	Our solutions mitigate the negative impacts associated with conventional oilfield chemicals, ensuring safer applications for equipment, personnel, and the environment.



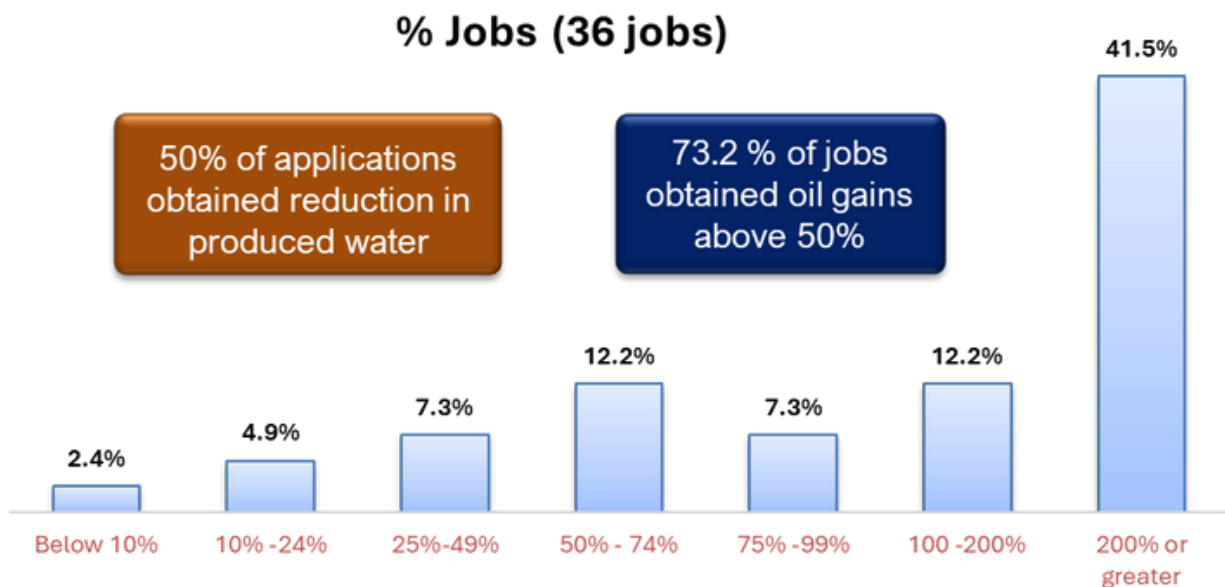
At Brainy Chemicals, we raise the bar with smart, high-performance solutions that enhance efficiency, safety, and environment protection



# Well Performance Enhancers

Maximizing the performance and profitability of producer and injector wells and elevating long-term hydrocarbon recovery and productivity.

Product	Distinctive Attributes
<b>BREOR NANO NW</b>	An engineered water-based mix of multi-nature nanoparticles, featuring smaller sizes and a narrower size distribution. In general act as effective Sor reducers, change rock wettability to enhance hydrocarbon phase mobility. Designed to remove organic depositions from wellbore area, may be used as standalone solution or as additive in water-based treatments.
<b>BREOR BIO</b>	A family of water-soluble formulations resulting from the interaction of selected microorganisms that enhance the mobility of hydrocarbon phases in the porous media. This is achieved by a combination of mechanisms including changes in rock wettability, effects in water-oil interfacial forces, viscosity reduction and breaking of longer and heavier carbon chains.
<b>BREOR DUO</b>	Formulations that through analysis of field application in wells and lab analysis have consistently proven their capability to enhance hydrocarbon production and reduce water volume across different lithologies and variety of application scenarios.



## OIL RATE INCREMENTAL (% OF PRE-TREATMENT RATE)

OIL BENEFIT DURATION	BEYOND 6 MONTHS	BEYOND 9 MONTHS	BEYOND 12 MONTHS	BEYOND 18 MONTHS
<b>% JOBS</b>	<b>90 %</b>	<b>60%</b>	<b>45%</b>	<b>20%</b>

# Well Stimulation & Remedial Fluid System Solutions

Brainy Chemicals enhance reservoir-well connectivity with a portfolio of innovative specialties that improve performance of production and injection wells

Product	Distinctive Attributes
AIO XT	<b>Biodegradable substitute for conventional HCL acid treating systems in carbonates.</b> Exceptional performance in the removal and inhibition of inorganic scale. Suitable for use in high-temperature scenarios where acid corrosion is a major concern. Chelating agent in various matrix treatments (carbonates, sandstones). Additionally, it is a cost-effective, high-performance precursor of HF in acid treatments of sandstone formations prone to damage by fine migration.
DUALIO 0230	Works as substitute of Paraffin Acid Dispersion (PAD) emulsified systems. It is very effective in removing organic (paraffin, asphaltene, tar) and inorganic (scale) depositions from producing and injection wells.
BRQ 4510	Biodegradable, neutral-pH, non-hazardous, and environmentally friendly chelating agent with superior performance for Iron (Fe+3) control.
BRQ 5000	Superior performance chelating agent for divalent ions (Ca+2, Mg +2)
BRTC 0916	A biodegradable, neutral-pH, non-hazardous, and environmentally friendly system for tubular pickling and rust removal in both downhole and surface applications. This cost-effective solution serves as an excellent replacement for traditional acid-based products.
BSD 600	Innovative Smart Diversion system. Superior performance and flexibility across a wide range of carbonate and dolomite reservoirs with permeability contrasts.
BRSU 5035	Non-Ionic surfactant for water base fluid systems. Excellent performance as a wetting agent for demulsification and foam control applications.
BRSU 0110	A nonionic surfactant, non-emulsifier, and interfacial tension reducer suitable for application in any organic-based treatment.
ISSD 1031	Efficient dissolution of iron sulfide scales in oil and gas systems. Its high dissolution capacity, low corrosivity, and environmental safety, deliver superior results.
BRODR 0850	A comprehensive family of Friction, Drag, Viscosity reducers designed to enhance efficiency in flow and transport of crude oil and its refined products.
BRWDR 0850 BRFFR-300	Additives to enhance effectiveness and cost efficiency in pumping operations (by reducing pumping pressures and increasing rates). Applicable to hydraulic fracturing, well treatments and drilling and completion applications
BRFPE-100	Nanofluid solution that enhances fracturing job efficiency thanks to their documented benefits in terms of fluid viscosity, leak off rates and post-job cleanup.
BRAS-900	Unparalleled performance in preventing sludge precipitates during acid stimulations. A comprehensive 4-in (anti-sludge, iron chelating, reducing, sequestering agent).



# Intelligent Water Management, Conformance Control & Sustainable Reuse

From reducing undesired water production and its related problems to enabling the reuse of produced water, our specialties are engineered to deliver value at every stage of the water management cycle in Oil and Gas operations.



Product	Distinctive Attributes
<b>BWRC-400</b>	Improved Adsorption RPMs that are designed to minimize water permeability while maintaining oil flow in Carbonate reservoirs.
<b>BWRS-200</b>	Improved Adsorption RPMs that are designed to minimize water permeability while maintaining oil flow in sandstone reservoirs.
<b>BRDB-500N</b> <b>BRDB-500B</b>	Proprietary formulations that are designed to enhance hydrocarbon productivity and reduce water production in a single application. Typically used as standalone solutions with a soaking time. Also applicable to water injectors.
<b>BRWIE-600</b> <b>BRWDR 0850</b>	A formulation designed to enhance effectiveness and cost efficiency in Water Injection operations (by reducing pumping pressures and increasing rates).
<b>BRS-8540</b>	Formulation enabling the reuse of produced water (usually lower-quality, high salinity and TDS) in oilfield operations significantly reducing the water footprint and associated costs of water treatment, transportation, and disposal. Enables the use of produced water in borate-based fracturing gel without compromising rheological performance.
<b>BREOR NANO WF</b>	Nanofluid designed to enhance the performance of waterflooding by optimizing sweep efficiency, reducing residual oil saturation, altering rock wettability and enhancing hydrocarbon recovery.

# Flow Assurance, Corrosion and Integrity Management

Flow assurance is paramount in the Oil and Gas industry, ensuring the uninterrupted and efficient movement of hydrocarbons from the reservoir to processing facilities.

Issues such as the formation of hydrates, wax, asphaltenes, emulsions and scale can lead to costly blockages, reduced production, and even equipment damage.

Brainy Chemicals provides a complete and top-performing portfolio of chemical specialties to prevent and mitigate these challenges, ensuring continuous flow and optimizing operational efficiency.



Product	Distinctive Attributes
<b>BRIS 2710</b> <b>AIO XT</b>	High-Performance & Low-Toxicity CaCO <sub>3</sub> inhibitor and dissolver. Applications via capillaries or squeeze treatment. Suitable for cleaning pipes of injectors wells.
<b>BRCI 1055</b> <b>BRCI 1058</b>	Corrosion inhibitors for inorganic and organic systems.
<b>BRIC 9018</b>	Biodegradable anti-sludge & complete Iron-control solution for acid stimulations. A comprehensive 4-in (anti-sludge, iron chelating, reducing, sequestering agent).
<b>BROC 705</b> <b>BRAD 607</b>	Paraffin inhibitors and dispersants. High-performance solvents for paraffin and asphaltenes removal. Cost-effective, safer and environment friendlier substitutes of aromatic and aliphatic solvents.
<b>BRQ 4510</b>	Biodegradable, neutral-pH, non-hazardous, cost-effective and technically superior iron chelating for acidizing treatments and brine-based fluid applications. Delivers superior and reliable iron control (Fe+3) in the most challenging conditions.
<b>BRQ 5000</b>	Superior performance chelating agent for divalent ions (Ca+2, Mg +2).



# Drilling & Completion Solutions

Proven chemical solutions for wellbore stability, fine stabilization, enhanced iron control in drilling and completion fluids.

Product	Distinctive Attributes
<b>BRCB-300</b>	A highly concentrated liquid designed to replace potassium chloride in drilling and completion applications. This formulation is safer and more environmentally friendly than conventional KCl substitutes



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## LOCATIONS:

### COLOMBIA

TRANV 19A 97-06 OF 201  
BOGOTA  
11021

### UNITED STATES OF AMERICA

FREDERICK INNOVATIVE TECHNOLOGY CENTER, INC  
321 BALLENGER CENTER DRIVE  
SUITE 125  
FREDERICK, MD 21703

### UNITED ARAB EMIRATES

ABU DHABI  
SAADIYAT ISLAND



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