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.


Brainy Chemicals LLC
SUPERIOR PERFORMANCE
400
350
300
250
200
150
100

Lab-to-Field Synergy
Delivering What Operations Demand







At Brainy 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



Brainy Chemicals LLC

SUPERIOR PERFORMANCE

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.	·Nanofluids ·Biotechnologies ·DB: Dual Benefit Solutions [1] ·Hydrocarbon Mobility Enhancers ·Relative Permeability Modifiers (RPMs)
Well Stimulation & Remedial Fluid System Solutions	Enhancing effectiveness, profitability and environmental footprint of stimulation and remedial well treatments.	·Single-Step and Multifunctional HF Acidizing ·Performance Enhancers for Acid Treatments ·Substitutes for Conventional Acids ·Performance Enhancers for Organic Solvents ·Substitutes for Conventional Organic Solvents ·Superior Performance Chelating Agents ·Fines and Clay Stabilizers ·Tubular Cleaners and Corrosion Protectors ·Innovative Diversion Agents ·Surfactants ·Fracturing Fluid Enhancers
Smart Water Management, Sustainable Reuse & Conformance Control	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 and maximizing the benefit of injection wells.	·RPMs for Carbonates and Sandstones ·DB: Dual Benefit Solutions [1] ·Water Injection Enhancers ·Water Injection Restorers ·"Schmo" removers ·Enablers for Reuse of Produced-Water ·Water Shut-Off Solutions
Flow Assurance, Corrosion, and Integrity Management	Integrated strategies and distinctive solutions to prevent flow and injection disruptions, mitigate corrosion, and extend the operational lifespan of Oil and Gas infrastructure.	·Scale Inhibitors and Dissolvers ·Mixed-Scale Dissolvers ·Paraffin Inhibitors and Dispersants ·Asphaltenes Inhibitors and Dispersants ·Additives for Control of Iron-Related Issues ·Corrosion Inhibitors and Passivators ·Encapsulated Chemistry for Downhole Applications ·Friction–Drag Reducers ·Iron Sulfide Dissolvers (Non H_2S Releasing) ·"Schmo" removers
Drilling & Completion Solutions	Proven chemical solutions for wellbore stability, fine stabilization, enhanced ion control in drilling, and completion fluids.	·Completion Brines ·Shale Inhibition Additives ·Additives to Reduce Fluid Losses

(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 enhancing the performance of 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 delivers measurable cost savings.

As Standalone Solutions 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, technically robust, and versatile. Whether overcoming existing constraints and challenges, widening application windows, 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 their efficiency and reducing additive load but may also act as reliable standalone substitutes for HCl in carbonate stimulation. Their controlled reactivity, lower corrosiveness, and deeper stimulation capacity make them ideal for wormhole creations even in high-temperature, H_2S-rich, or environmentally sensitive applications—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 to solve both immediate and long-term field challenges, with benefits that range from greater efficiency and lower environmental impact to longer-lasting benefits and simpler applications. Each formulation follows a holistic approach and delivers measurable operational, environmental, and economical value.

Superior Performance at Lower Concentrations	Our formulations provide exceptional, long-lasting efficacy with reduced dosage requirements, thus enabling cost savings and optimized logistics.
Multi-Functionality in a Single Product	By addressing multiple operational needs within a single formula, we optimize workflows, reduce chemical inventory, and simplify application processes.
Enhanced Sustainability Through Innovation	We replace traditional fluid systems and additives with safer, environmentally responsible alternatives, actively supporting clients' sustainability goals.
Asset Integrity and Operational Continuity	Designed to preserve integrity of wells and surface infrastructure, our chemicals extend asset lifespan and minimize operational downtime.
Minimizing Undesired Outcomes and Reprocesses	Our solutions mitigate the drawbacks of conventional oilfield chemicals, ensuring safer applications for equipment, personnel, the environment, and the process.
Expanded Performance Envelope and Field Versatility	Our chemistries overcome challenges beyond the reach of conventional treatments such as high H_2S levels, elevated temperatures, and demanding chelation requirements, thereby expanding the range of viable field applications.
Seamless and Flawless Operational Execution	Our products work as standalone solutions or as additives that enhance conventional fluid systems. Full compatibility with existing fluids lets them integrate seamlessly into field operations without disruption.

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



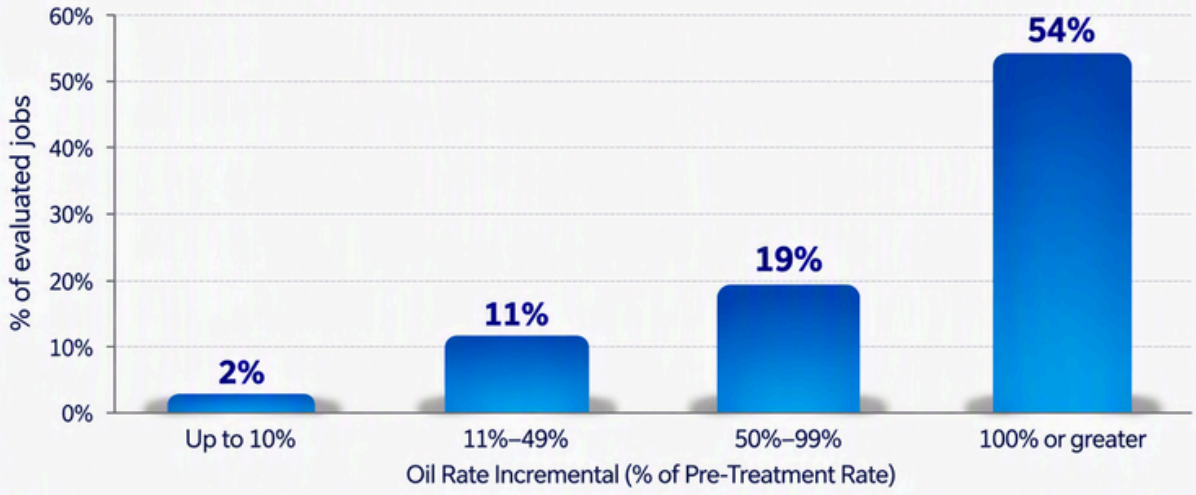
Well Performance Enhancers

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

Need-Challenge	Our Solutions and theirDistinctive Attributes
NANOFLUID TECHNOLOGIES	A family of water-based nanofluids combining multi-nature nanoparticles and premium surfactants to alter wettability, reduce IFT, and improve hydrocarbon mobility. Flexible for use as standalone solutions or performance-enhancing additives in chemical treatments.
BIOTECHNOLOGY FORMULAS	Innovative biosurfactants and bio-enzymes produced by selected microorganisms under controlled conditions. Designed to enhance hydrocarbon mobility in porous media through wettability alteration and reductions in interfacial tension (IFT) and viscosity.
DUAL-BENEFIT SOLUTIONS	Field-proven formulations delivering dual benefits in a single application: increased hydrocarbon production and reduced water production. Designed for application across a broad range of reservoir lithologies.

Field results of dual-benefit technologies.

Sample of 40 jobs. Mixed Lithologies. Different regions



50% of applications obtained reduction in produced water

73.2% of jobs obtained oil gains above 50%

BENEFIT DURATION	BEYOND 6 MONTHS	BEYOND 9 MONTHS	BEYOND 12 MONTHS	BEYOND 18 MONTHS
% JOBS	90 %	60%	45%	20%

Well Stimulation & Remedial Fluid System Solutions

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

Need- Challenge	Our Solutions and their Distinctive Attributes
SINGLE-STEP HF ACIDIZING	A next-generation, multifunctional, single-step HF sandstone acidizing system to effectively addresses both calcareous and fines challenges. It combines an acidic scale dissolver with advanced chelating agents to enhance reaction kinetics and prevent damaging reprecipitates. Used as a standalone solution or blended with other acids, it enables safer, cost-efficient, and controlled HF stimulation with enhanced productivity and lower risk.
NON-HCl SCALE DISSOLVER	A biodegradable acidic solution, distinct from conventional inorganic and organic acids, for sandstone and carbonate acidizing and scale removal. Ideal where HCl is restricted, H_2S is present, or alternative reaction kinetics are desired. It dissolves scale while controlling reprecipitation, and offers lower corrosivity for high-temperature applications.
SCHMOO REMOVAL AND PREVENTION	Dual-action, cost-efficient treatment that dissolves and prevents organic and inorganic schmoo deposits, restoring and sustaining injectivity without invasive interventions. Proven to increase injectivity and injection volumes while eliminating line-cleaning downtime.
REMOVAL OF ORGANIC AND INORGANIC DEPOSITS	Two-component, field-mixed chemistry for simultaneous removal of organic and inorganic deposits, including paraffin, asphaltenes, tar, and acid-soluble scale. A cost-effective alternative to convenciontal “Paraffin Acidic Dispersion” (PAD) treatments for efficient wellbore and near-wellbore cleanup.
IRON SULFIDE SCALE DISSOLUTION (NON-H_2S RELEASE)	Advanced non-HCl, non-H_2S releasing, and non-corrosive formula that is capable of dissolving iron sulfide species (including pyrite) without releasing H_2S during the reaction. Suitable for the removal or dissolution of mixed deposits present in oil and gas wells, from downhole to surface equipment (production tubing, flowlines, surface equipment, etc.).
SLUDGE PREVENTION	Anti-sludge additive designed to complement iron-control and prevent sludge formation under challenging acid-stimulation conditions, improving fluid compatibility and treatment reliability.



Well Stimulation & Remedial Fluid System Solutions

Need- Challenge	Our Solutions and their Distinctive Attributes
IRON CHELATION AND CONTROL	Best-in-Class, biodegradable, neutral-pH, non-hazardous chelating agent designed for superior iron Fe^{3+} control. Its exceptional stability across a wide pH range enables effective application in acidic and non-acidic fluid systems, including completion brines. A version capable of chelating above 20,000 ppm of iron without reprecipitation is also available.
CHELATION OF DIVALENT IONS	Superior performance chelating agent for divalent ions (Ca^{2+}, Mg^{2+}). Suitable for sandstone and carbonate reservoirs.
TUBULAR CLEANING AND CORROSION PROTECTION	Advanced, biodegradable, neutral-pH formulation that comines tubular cleaning and corrosion protection in a single treatment. Effectively removes rust and iron oxides without damaging the base metal while creating a protective surface layer that helps mitigate general corrosion and pitting. Suitable for downholes and surface applications across common oilfield metallurgies, providing a cost-effective alternative to conventional acid-based cleaning.
TREATMENT FLUID DIVERSION	Biopolymeric SMART DIVERISON AGENT designed to temporarilly restrict preferential and less resistance treatment-fluid paths. Allows redirecting the injected fluid to less permeable zones, improving treatment placement and zonal coverage. Fully self-degrading with no residual formation damage, it can be fine-tuned on-site for temperature, pumping rate, permeability contrast, and treatment duration. It is suitable for carbonated, dolomites, and sandstones.
FRACTURING FLUID PERFORMANCE	A proprietary nanofluid with multiple benefits during and after fracturing operation. These benefits include enhanced fluid stability at higher temperatures, improved proppant transport and leak-off control, shorter post frac cleanups, and in general, better hydraulic-fracturing efficiency, fracture conductivity, and hydrocarbon mobilization.
CLAYS AND FINES CONTROL ADDITIVES	Advanced additives designed to stabilize clays and formation fines during stimulation and remedial operations. By preventing caly swelling, fines migration, and associated formation damage, they help preserve permeability, improve treatment effectivenss, and sustain long-term well productivity.
SURFACTANTS FOR WATER-BASED SYSTEMS	High-performance, non-ionic surfactant for water-based systems, providing effective wetting, demulsification, and foam control while enhancing fluid mobility, flowback, and overall treatment performance across stimulation, production, and EOR applications.
SURFACTANTS FOR OIL-BASED SYSTEMS	Advanced non-ionic surfactant and non-emulsifier designed for organic- and oil- based treatments. Provides effective interfacial tension reduction and emulsion control, enhancing fluid compatibility, mobility, cleanup, and overall treatment performance.

Well Stimulation & Remedial Fluid System Solutions

Need- Challenge	Our Solutions and their Distinctive Attributes
FRICTION & DRAG REDUCTION	Advanced additives engineered to reduce turbulent-flow friction and pressure losses, enabling higher flow rates at lower pumping pressures. Improve pumping efficiency, fluid transport, and overall hydraulic performance across applications such as hydraulic fracturing, water injection, and pipeline operations. Oil and Water base versions suitable for a variety of applications.
VISCOSITY REDUCTION	Specialized additives designed to reduce apparent viscosity of heavy or high-resistance fluids, improving pumpability, mobility, and transport efficiency. Help lower flow resistance and facilitate crude-oil handling, transportation, and treatment operations.
DOWNHOLE CHEMICAL INHIBITION	A family of tailored chemistries microencapsulated in solid carrier bars for continuous, autonomous, and intervention-free downhole delivery. Designed to provide long-lasting, cost-effective, and capillary-free dosing of chemical inhibitors, delivering sustained protection against corrosion, scale, and organic deposits throughout wellbore and surface systems.



Smart Water Management, Conformance Control & Sustainable Reuse

From reducing undesired water production and associated costs, to maximizing water-injection performance and enabling produced-water reuse, our solutions improve operational efficiency and create value throughout the Oil and Gas Water Management Cycle.



Need-Challenge	Our Solutions and their Distinctive Attributes
REDUCE WATER VOLUME IN PRODUCER WELLS	**RELATIVE PERMEABILITY MODIFIERS (RPMs)** Advanced Improved Adsorption RPMs designed to selectively reduce water permeability while preserving hydrocarbon flow. Deliver substantial, long-lasting water reduction in both carbonate and sandstone reservoirs.
	WETTABILITY AND INTER-FACIAL TENSION (IFT) MODIFIERS Proprietary formulations that through the combination of nano and bio technologies reduce water production and enhance hydrocarbon productivity in a single application. Typically used as standalone solutions with a soaking time and suitable across different lithologies including sandstones, carbonates, and dolomites.
	WATER SHUT-OFF Next-generation polymer systems engineered to selectively isolate targeted water-producing zones. Tailored to operational and reservoir conditions to provide durable water isolation, and straightfoward and accurate placement in target zones.
MAINTAIN, RESTORE, AND ENHANCE WATER INJECTION	A versatile family of chemistries designed to restore injectivity, improve water-injection performance, and prevent recurring injectivity losses. Field-proven applications demonstrate sustained reductions in injection pressure and increased injection capacity.
ENABLE REUSE OF PRODUCED WATER	Technology enabling the reuse of high-salinity, high-TDS produced water across multiple oilfield applications, reducing freshwater demand, environmental footprint, and water-management costs. Enables produced-water reuse in fracturing fluids without compromising rheology or proppant transport.
ENHANCE WATERFLOODING PERFORMANCE	Nanofluid technology designed to improve sweep efficiency, reduce residual oil saturation, and alter rock wettability, ultimately increasing hydrocarbon recovery from waterflooded reservoirs.

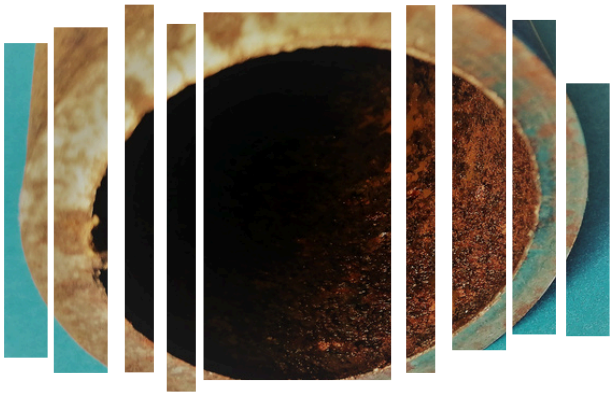
Flow Assurance, Corrosion, and Integrity Management

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.





Need-Challenge	Our Solutions and their Distinctive Attributes
$CaCO_3$ DISSOLUTION AND PREVENTION	High-Performance & Low-Toxicity $CaCO_3$ inhibitor and dissolver. Applications via capillaries or squeeze treatment. Suitable for cleaning pipes of injection wells.
CORROSION MANAGEMENT	Variety of water-based and oil-based corrosion inhibitors for use in downhole and surface applications.
WIDE SPECTRUM ANTI-SLUDGE	Additive that serves as a co-adjuvant for superior iron control and prevention of sludge precipitates in challenging acid stimulation scenarios.
PARAFFIN & ASPHALTENE INHIBITORS AND DISPERSANTS	Cost-effective and high-performance formulas for paraffin and asphaltenes dispersion and inhibition. Customizable to a variety of application scenarios, water- and crude- oil attributes, and temperatures.
BEST-IN-CLASS IRON CHELATING AGENTS	Biodegradable, neutral-pH, non-hazardous, and environmentally friendly chelating agent with superior performance for iron (Fe^{3+}) control. Delivers outstanding stability and behavior over a wider pH range which ensures its ample application in acid and non-acid (completion brines) fluid systems. This chemistry is also available in a similar version capable of chelating more than 20,000 ppm of iron whilst ensuring a minimum risk of reprecipitation.
DIVALENT IONS CHELATING AGENT	Superior performance chelating agent for divalent ions (Ca^{2+}, Mg^{2+}). Suitable for sandstone and carbonate reservoirs.
SAND CONTROL TECHNOLOGY	An innovative resin- and polymer- free sand control technology that strengthens grain-to-grain adhesive forces to reduce sand production without requiring damaging permeability-blocking barriers.

Drilling & Completion Solutions

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

Need-Chellange	Our Solutions and their Distinctive Attributes
COMPLETION BRINES	Highly concentrated liquid system that delivers KCl-equivalent performance in drilling and completion fluids. Its liquid form improves safety, reduces logistics and mixing time, and offers a more environmentally responsible alternative to conventional KCl systems.







Brainy Chemicals LLC

SUPERIOR PERFORMANCE

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