

## Verza360<sup>®</sup> Series

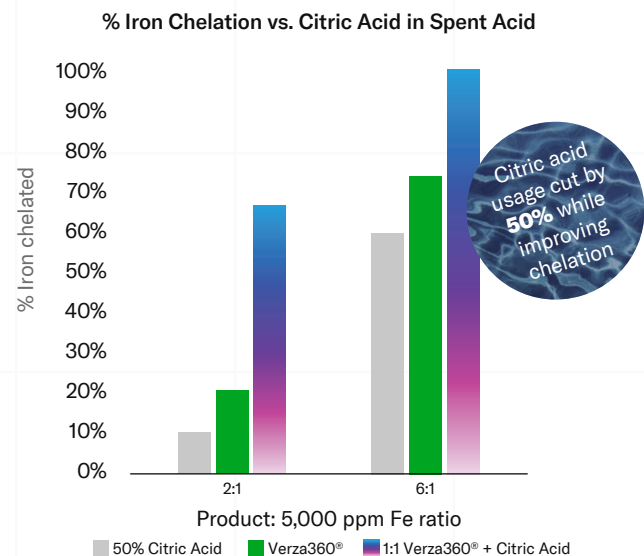
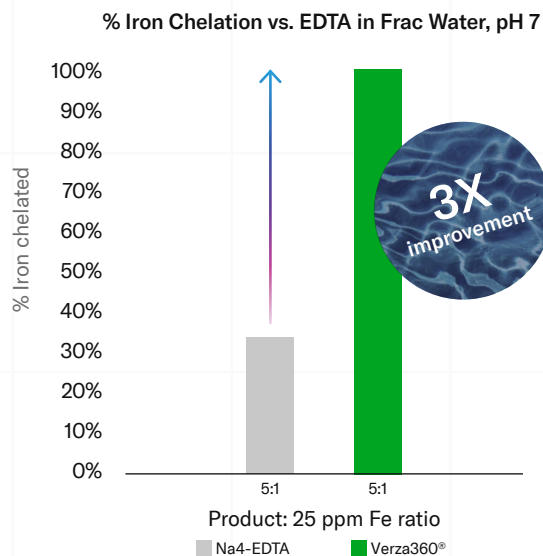
# Bio-Based Iron Control Agents for Hydraulic Fracturing Applications

## Enabling Lower Overall Frac Chemical Costs with Effective Iron Control

The Verza360<sup>®</sup> series are organic acid-based iron control agents derived from plant-based materials. This series enables high iron control and cost efficiency while providing a low carbon footprint to formulators across the oil and gas industry.

### Product Attributes

- Substitutes or complements traditional chelating agents, such as EDTA and citric acid
- High iron selectivity to prevent or remediate iron scales
- Prevents iron interference with friction reducer performance & prevents “gummy bears”, mitigating formation or proppant pack damage
- Compatible with other frac chemical package additives
- Substitutes or complements similar chemistries used in frac acid spearheads
- Non-toxic, biodegradable, and sulfate-free
- Locally manufactured in USA using novel chemienzymatic process
- Enables lower overall chemical usage, treatment costs, and GHG emissions



Fe concentration determined by ICP.

### About Solugen

Solugen is a bio-based specialty chemicals manufacturer and supplier whose mission is to decarbonize the chemical industry by revolutionizing the way chemicals are made for use across a variety of markets and applications.

Contact us at [energysolutions@solugen.com](mailto:energysolutions@solugen.com) for more information and pricing of our products and services.

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