

PROFE 105

■ Iron Control

> PRODUCT DESCRIPTION

ProFE 105 is a convenient source of citric acid, pre-dissolved in water for acidizing use. Citric acid is typically used to sequester dissolved iron in HCL acid solutions and to prevent its precipitation as solids as the acid spends.

> PACKAGING

ProFE 105 is available in 330 gallon totes and bulk transport. Other packaging options may be available upon request.

> RECOMMENDED APPLICATION

ProFE 105 is recommended as an effective iron chelating agent for oilfield acidizing. It offers economical protection against iron precipitation in treatments less than 180°F.

ProFE 105 is typically used in hydrochloric acid at loadings of 2 gpt (gallons per thousand). Loadings depend on the severity of iron problems to be encountered. ProFE 105 can be combined with acetic acid (at equal loadings) to utilize the iron sequestering ability of citric acid along with the pH buffering capabilities of acetic acid.

ProFE 105 is corrosive to most metals and should be stored in a plastic or fiberglass tank with plastic or stainless steel piping and valves.

Typical Physical Properties

Flash Point (°F/°C)	Not Applicable
Freeze Point (°F/°C)	8 / -13.3
Density	9.82 lb/gal
Specific Gravity	1.77 (25 °C)
Solubility	Complete
pH	2 - 3 1% v/v

Disclaimer

While the information and data contained herein are presented in good faith and believed to be reliable, nothing herein shall be deemed to constitute a warranty, express or implied, that the information or data is reliable, accurate, or complete or that the products described herein are merchantable or fit for a particular purpose or that said information, data, or products can be used without infringing the intellectual property rights of third parties. Individuals who receive the products or the information or data relating to the products described herein, must use their own judgment in determining fitness for a particular purpose. Unless otherwise stated, the information or data contained herein relates to the products when not used in conjunction with any other products or materials. ProFrac and its affiliates ("ProFrac") disclaim all express and implied warranties of merchantability, fitness for a particular purpose, and non-infringement. ProFrac shall not be liable for any loss or damage that may occur from the use of the products described herein, including the use of the products in conjunction with other products or materials, or reliance on the data or information described herein.