

Oilfield Chemical Additives Supplier for

- Drilling
- Completion
- Production
- Stimulation

Acidizing Corrosion Inhibitor ***UZ CI-180***



Acidizing Corrosion Inhibitor UZ CI-180

Corrosion inhibitors infused into a frac fluid system help to provide critical protection during the stimulation process to minimize the corrosive effects of treatment chemicals on surface equipment and downhole metals and alloys.

To protect assets such as tubulars and tools from highly acidic fluids used in acid fracturing operations that can cause severe corrosion. We provide a portfolio of acid corrosion inhibitors specifically designed to break down acids during hydraulic fracturing and acidizing treatments. Some of these corrosion inhibitors are more environmentally acceptable versus traditional corrosion inhibitors, thereby providing options for heavily regulated areas.



Protect downhole equipment and tubulars from corrosive environments, Corrosion inhibitors are based on our experience developing market-leading chemical compounds used throughout the energy industry

Technical Index

Appearance	Dark reddish brown liquid
Density, g/cm ³	1.0-1.2
pH	2.0-6.0
Solubility	Soluble in acids and water
ionic	cationic
Flash point	>75°C

Product introduction

To protect assets such as tubulars and tools from highly acidic fluids used in acid fracturing operations that can cause severe corrosion. We provide a portfolio of acid corrosion inhibitors specifically designed to break down acids during hydraulic fracturing and acidizing treatments. Some of these corrosion inhibitors are more environmentally acceptable versus traditional corrosion inhibitors, thereby providing options for heavily regulated areas.

Protect downhole equipment and tubulars from corrosive environments, Corrosion inhibitors are based on our experience developing market-leading chemical compounds used throughout the energy industry.

UZ CI-180 is a high temperature resistant acidizing corrosion inhibitor for oilfield use. In the process of acidizing or pickling, the acid will corrode the steel, and at high temperature, the rate and range of corrosion will be greatly increased, therefore, in the oilfield production, the corrosion prevention of high-temperature pipe is particularly important, which is not only related to the benefits of oilfield exploitation, but also closely related to the production safety. The degree of acid erosion on pipelines and equipment depends on the contact time, acid

concentration and temperature conditions, etc. UZ CI-180 has excellent high-temperature resistance, and at temperatures up to 350°F (180°C), the corrosion effect of acid on steel at high temperatures at the bottom of the well can be greatly reduced by adding UZ CI-180 to the acid mixture.

Application

UZ CI-180 corrosion inhibitor can be used in matrix acidizing and production enhancement operations, production acidizing and production enhancement operations, and wellbore cleaning with acidic formulations.

Recommended dosage

The recommended dosage at different temperatures is as follows.

UZ CI-180 % (volume fraction)			
Temp/°F	15%HCl&12-3Mud	20%HCl	28%HCl
<200	6	8	12
201-225	8	12	16
226-250	10	25	20
251-300	12-15	15-24	24-30
301-350	20-30	30-50	40-60

(Concentration depends on acid type, strength, wellbore temperature, contact time and additional additives)

Product Benefits

- 1.Excellent high-temperature metal corrosion protection
- 2.Provide corrosion protection in all HCL and HCL-HF blends up to 177°C
- 3.Contains no heavy metal salts, and has a high flash point.
- 4.Reduces acid corrosion rates on common oilfield tubulars, including coiled tubing.
- 5.Improves design flexibility because it works in virtually all strengths of hydrochloric acid and mixtures.
- 6.hydrochloric-hydrofluoric and hydrochloric-organic acids.
- 7.Disperses easily in all acid-based fluids.
- 8.Can provide acid corrosion inhibitor protection for as long as 24 hours.
- 9.Can provide acid corrosion inhibitor protection for K55, J55, N80, CT80, QT800 and P110、P110S etc.

Storage and Shelf Life

This product should be stored in ventilated and dry warehouse. No contact with acid, alkali and other chemicals. Keep away from heat.

This product should be handled with care during transportation. Avoid moisture and damage.

Has a shelf life of 12 months from the date of manufacture.

This product is of no hazard and can be transported as general chemicals.

Handling and Packaging

All personnel handling this material must treat it as an industrial chemical, wear protective equipment, and observe the precautions described in the Material Safety Data Sheet. Read the Safety Data Sheet and container label for safe use before handling.

UZ CI-180 is available in 200 kg drum, or according to customers' requirements.

Attachment

1、 Test of specific gravity

- 1) Loading 250 ml sample into 250 ml measuring cylinder.
- 2) Place the measuring cylinder in a water bath and keep the temperature at 25°C.
- 3) Put in a densitometer to measure sample specific gravity, record it.

2、 Test of pH value

- 1) Loading 100 ml sample into 250 ml beaker.
- 2) Place the beaker in a water bath and keep the temperature at 25°C.
- 3) Check the pH meter.
- 4) The pH value of the sample is measured by pH meter, record it.

3、 Test methods of corrosion rate

- 1) Keep the oven temperature at 160°C.
- 2) Configure 200 ml of 20% HCL, adding predetermined amount of CI and INTENSIFIER.
- 3) Put prepared steel Coupons in the cell, seal, tighten, put in oven, preheat for 30 minutes at 160°C.
- 4) Start the timing and keep the Aging Cell for required exposure period in mechanical convection oven.
- 5) Take the cell out of the oven, cool, release the pressure, take out the metal coupon, clean, wash and weigh for any weight loss.
- 6) Calculate the corrosion rate in Lbs/Ft² and g/(m².h).
- 7) Check for any pitting on the metal surface and report.

Sichun Youzhu New Material Science & Technology Co.,Ltd. (Youzhu Chem)

National Science Park, Xindu Street No.8,
Xindu District, Chengdu City,
Sichuan Province, China
P. C :610500



For Technical Information and Support:

+86 13808175002

+86 028-83089378

E-mail:info@youzhuchem.com

Youzhu Chem offers a wide range of oil field chemicals widely used in the various stages of oil and gas production. And we have developed the finest quality Oil Soluble Demulsifier, Water Soluble Demulsifier and Corrosion Inhibitors. Our products enable customers to maximize value in their oilfield operations, and increase the overall efficiency of the well.