

# TG200 Corrosion Inhibitor for Acidification

## 1. Product Introduction

TG200 Corrosion Inhibitor for Acidification is a strong adsorption type high temperature corrosion inhibitor for acidification, TG201 is suitable for chromium-containing materials, TG210 is suitable for carbon steel materials. It can be firmly adsorbed on the metal surface to form a multi-layered network dense protective film, which blocks the contact between the acid liquid and the metal substrate, resulting in no pitting. The maximum applicable temperature of Type II reaches 160 °C. It is used for the anticorrosion of pipelines and equipment in the acidification construction process of oil and gas wells and injection wells. There is a special effect on the protection of Cr-containing tubing materials under high temperature acidification environment. The product has been certified as the independent innovation product by CNPC and it is widely used in western oil fields such as Tarim Oilfield.



## 2. Performance Indicators

Items	Index
Appearance	Reddish brown liquid (main agent)
	Brown clear liquid (auxiliary)
Compatibility	Good compatibility with other surfactants
Dispersibility	Disperse evenly in acid
Corrosion rate, $\text{g}/(\text{m}^2 \cdot \text{h}) / (160\text{ }^\circ\text{C}, 4\text{ h}) \leq 40$ (12 %HCl+3 %HF, 4.0 % main agent+2.0 % auxiliary)	

### **3. Core Advantages**

Rapid film formation, excellent temperature resistance.

### **4. Scope of application**

This product is used for anticorrosion of pipelines and equipment in oil and gas wells and injection well during the acidizing construction process. There is a special effect on the protection of Cr-containing tubing materials under high temperature acidification environment.

### **5. Usage**

The recommended dosage is 3.0 % main agent + 1.5% auxiliary agent at 120~140 °C and it is 4.0 % main agent + 2.0 % auxiliary at 160 °C. The inhibitor can be directly added into the acid solution, and after mixing, it can be operated as the normal acidification process. If the concentration of the acid solution is too large, the amount of corrosion inhibitor should be appropriately increased under the guidance of the technician.

### **6. Packing and Storage**

(1) This product is packed in 200 L plastic drum or according to user requirements, with stable performance and safe transportation.

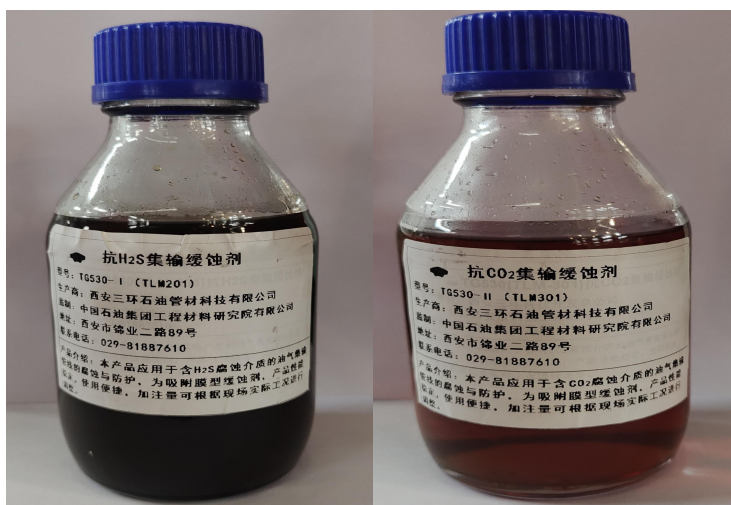
(2) It should be stored in a cool, dry and ventilated warehouse. The valid is one year.

# TG530 corrosion gathering pipeline inhibitor

## 1. Product Introduction

TG530 corrosion gathering pipeline inhibitor is an imidazoline derivative compound. This compound is composed of polar groups and non-polar groups. It has strong adsorption, fast film forming speed, low temperature resistance, and good fluidity at low temperature. It is not affected by high salinity, high sulfur, high acid, and high chlorine corrosion media. It can effectively inhibit the corrosion of  $H_2S$  /  $CO_2$  /  $CO_2$ - $H_2S$ - $H_2O$  and other systems.

The product was recognized as an independent innovation product of China National Petroleum Corporation in 2019, obtained key new products in Shaanxi Province, and obtained two invention patents. It is used in Tarim oilfield and Changqing oilfield.



## 2. Performance Indicators

Items	Index
Appearance	Reddish brown liquid
Density, g/cm <sup>2</sup>	0.9-1.2
Compatibility	Good compatibility with other surfactants
Water solubility	Intersoluble with water
pH	5.0-8.0

### **3. Core Advantages**

Strong adsorption, fast film-forming speed, low temperature resistance and good fluidity at low temperatures. It is not affected by corrosive media with high salinity, high sulfur, high acid and high chlorine, and can effectively inhibit the corrosion of systems such as  $\text{H}_2\text{S}/\text{CO}_2/\text{CO}_2\text{-H}_2\text{S-H}_2\text{O}$ .

### **4. Scope of application**

The product is suitable for anti-corrosion of oil and gas gathering and transportation pipelines containing  $\text{H}_2\text{S}$  /  $\text{CO}_2$  corrosive medium and high salinity produced water.

### **5. Usage**

Filling directly, the recommended filling amount is 100 ppm, and the filling amount can be adjusted according to the actual situation on site.

### **6. Packing and Storage**

- (1) Using 200 L plastic barrel packaging, shelf life of 1 year ;
- (2) Stored in a cool ventilated place, pay attention to avoid light, waterproof, moisture.