

## 起泡剂 Foaming Agent

### 产品概述

本品外观一般呈无色或淡黄色均匀液体。由于泡沫流体具有低密度、低滤失、油层伤害小、高粘度、高悬砂等优点，因此本品能够在压裂液中起到减少摩阻作用，增加液体体积，减少井下气体和水分的作用。本品具有良好的水解性能，能够在压裂液中迅速分散和增稠，提高压裂效果。

### 性能特点

- 1、可提高压裂效果；
- 2、能够适应特殊地层；
- 3、可以有效提高设备效率；
- 4、泡沫酸具有较低的过滤速率，减少对地层的污染；

### 技术指标

项目		指标
外观		均匀液体
PH 值		6.0~9.0
凝点/°C		≤-10
表面张力（0.3%水溶液）/（mN/m）		≤28
发泡体积（0.3%，50°C）/mL		≥360
半衰期（0.3%，50°C）/min		≥60
热稳定性（80°C，24h）	发泡体积/mL	≥290
	半衰期/min	≥50
配伍性		混配，无絮凝、无分层、无沉淀
有机氯含量 a /%		0
仅限油井应用时做“有机氯含量”检测，气井应用时不做该项检测。		

### 产品用途

压裂起泡剂广泛应用于油田开采过程中的压裂液添加剂、管柱冲洗和油藏改造等环节，起泡剂配制的泡沫酸通过在压裂液中形成泡沫，降低液体与井壁之间的摩擦，同时增加液体体积，从而提高压裂效果，形成稳定的泡沫酸溶液，具有气举排水，快速返排等优点。

### 包装与贮存

1. 本产品一般吨桶、桶包装，吨桶净重 1000KG、桶装 200kg/桶、25kg/桶；可根据客户要求提供定制包装，运输过程中应轻装轻放，切勿倒置。
2. 本产品在贮存时必须旋紧桶盖，置于阴凉通风处，搬运及使用时应避免接触皮肤，溅入眼中



### Product Overview

The product generally appears as a colorless or light-yellow uniform liquid.

Due to the advantages of foam fluids—such as low density, low fluid loss, minimal reservoir damage, high viscosity, and excellent proppant suspension—this product can reduce friction in fracturing fluids, increase fluid volume, and decrease the gas and water content downhole.

It has good hydrolysis performance, enabling rapid dispersion and thickening in fracturing fluids, thereby enhancing the fracturing effect.

### Characteristics

- 1.Can enhance fracturing performance.
- 2.Able to adapt to special formations.
- 3.Effectively improves equipment efficiency.
- 4.Foam acid has a lower filtration rate, reducing formation contamination.

### Technical Specification

Item		Index
Appearance		Uniform liquid
pH Value		6.0~9.0
Pour Point/°C		≤-10
Surface Tension (0.3% aqueous solution) / (mN/m)		≤28
Foaming Volume (0.3%, 50 °C) / mL		≥360
Half-life (0.3%, 50 °C) / min		≥60
Thermal Stability (80°C, 24h)	Foaming Volume / mL	≥290
	Half-life / min	≥50
Compatibility		When mixed, no flocculation, no layering, no precipitation
Organic Chlorine Content a /%		0
“Organic chlorine content” test is conducted only when the product is applied in oil wells; it is not tested for gas well applications.		

### Applications

Foaming agents are widely used in oilfield operations such as fracturing fluid additives, tubing flushing, and reservoir stimulation. Foam acid prepared with the foaming agent forms stable foam in the fracturing fluid, reducing friction with the wellbore, increasing fluid volume, and improving fracturing performance. It also offers benefits such as gas lift drainage and quick flowback.

### Package and Storage

- 1.Typically packed in IBC totes (1000 kg) or drums (200 kg/25 kg), with custom packaging available. Handle with care during transport; do not invert.
- 2.Store tightly sealed in a cool, ventilated place. Avoid skin or eye contact during handling.year.



公司地址 Company Address:

陕西省商洛市商南县东正公司

Dongzheng Company, Shangnan, Shangluo, Shaanxi Province, China

公司电话 Company Office Number: 400-8031-008

邮箱 Email: dz@dongzhengjituan.cn

网址 Website: www.dongzhenghuagong.com