

# Taian Green Industry Co., Ltd.

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## TECHNICAL DATA SHEETS

1. Product name:

Erucamidopropyl betaine

2. Chemical Name:

EAB 40;

Erucylamido propyl betaine

3. CAS No.:149879-98-1

4. MF:C30H58N2O3

5. MW:494.79

6. Technical specifications

Item	Specifications	Results
Appearance	Yellowish transparent liquid	Conforms
Solid content	39~41%	40.2%
Sodium chloride	≤6%	4.3%
pH value	6~8	7.5
Conclusion	The results conforms with enterprise standards	

7. Usage

Erucamidopropyl betaine has good compatibility with anionic, cationic, nonionic and amphoteric surfactants and has mild properties. This product has good antistatic, antibacterial, biodegradability, very low biotoxicity; salt tolerance, Strong resistance to hard water.

Erucamidopropyl betaine can be used as a main agent, thickener, viscoelastic surfactant and oil displacing agent for oil and gas fields. It is used as thickener, conditioner, wetting agent and antibacterial agent in daily chemical or other industrial fields. Antistatic agents, etc.

Erucamidopropyl betaine has a hydrophobic group with a carbon number of 25 and contains a double bond, an amide bond and other groups for improving solubility. The critical micelle concentration (cmc) is  $1.02 \times 10^{-5}$  mol/L, and the corresponding surface tension  $\gamma$  cmc is 29.60 mN. /m, the compound system can achieve ultra-low interfacial tension of  $10^{-4}$ ~ $10^{-3}$ mN/m with a variety of reservoir conditions, and the

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interface performance is excellent.

Erucamidopropyl betaine in the salt solution or acid solution of different pH values, with the decreasing concentration of hydrochloric acid and the increase of PH value, the viscosity of the system increases rapidly, forming different strength viscoelastic solution or gel, this product is currently cleaned. One of the ideal surfactants for fracturing fluids, self-steering acids, and viscoelastic surfactants (VES).

Erucamidopropyl betaine is applied to the viscoelastic surfactant self-steering acid system, which acts as a mucic acid, a self-steering acid and a slow-acting acid. In the application of shunt acidification in heterogeneous reservoirs, the acid system automatically becomes sticky with the acid rock reaction, which has the function of shunt acidification and does not cause secondary damage to the formation.

Erucamidopropyl betaine is used in viscoelastic surfactant (VES) system. It is easy to prepare and easy to construct, high viscosity, high elasticity, automatic steering, low friction, low acid loss, high stability (resistance to salt) and easy return. It has no residue and no harm to the ground.

Erucamidopropyl betaine's viscoelastic system is resistant to temperature from 90°C to 110°C. If it is compounded with other surfactants and can withstand temperatures up to 130°C, this product is a heterogeneous multi-layer sandstone reservoir with medium to high temperature reservoirs and low to medium permeability. Reservoir—The ideal viscoelastic surfactant for the stimulation of production.

## 8. Package

200kg/drum