

Oilfield Chemical Additives Supplier for

- Drilling
- Completion
- Production
- Stimulation

High-Temperature Temporary Diverting Agent TDA-300



High-Temperature Temporary Diverting Agent TDA-300

The diverting agent is used to plug temporarily the high permeability layers or treated areas during acidizing, which causes the acid fluid to divert to the low permeability layers or the untreated areas to achieve homogeneous acidizing.

Besides, the technologies of hydraulic fracturing and acid fracturing rely on diverting agent to block the old fractures, natural fractures or the just-opened new fractures, forcing



the fracturing fluid or acid to divert to create more new fractures, thereby achieving volumetric fracturing or network acid fracturing.

Technical Index

Appearance	White, clear solid
Specific Gravity	1.1-1.38 g/ml
Solubility	Water, acid
Shape and size	Ball, particle, powder, fibre

Product introduction

Temporary Diverting Agent TDA-300 is a crucial component in the field of well stimulation and hydraulic fracturing operations.

In the oil and gas industry, the process of hydraulic fracturing involves injecting a high-pressure fluid mixture into a wellbore to create fractures in the rock formation, allowing for the extraction of oil and gas. The effectiveness of this process relies on the ability to ensure complete stimulation of all perforation clusters and targeted zones within the reservoir. This is where the TDA-300 comes into play, providing temporary diversion to optimize the efficiency of the hydraulic fracturing process.

TDA-300 is specifically engineered to address the challenges associated with high-temperature hydraulic fracturing, re-fracturing, acid fracturing, and matrix acidizing applications. These operations often encounter extreme downhole temperatures, making it essential for the diverting agent to withstand such conditions while effectively diverting the fracturing fluid to the desired zones. The agent is designed to offer both near-wellbore and far-field diversion in sandstone and carbonate formations, catering to a wide range of geological settings.

One of the key features of TDA-300 is its versatility in terms of carrier fluids. It can be seamlessly pumped in various carrier fluids such as slick water, gelled acid, linear gels, and viscoelastic surfactants, providing flexibility in application and logistics. This adaptability allows for simplified integration into different fracturing fluid systems, enhancing operational efficiency.

The composition of TDA-300 is carefully engineered to achieve optimal diversion performance. It utilizes a tri-model particle size distribution, comprising a mixture of large robust particles and smaller particles.

This design enables the diverting agent to bridge across perforations, wormholes, and fractures, effectively diverting the fracturing fluid while minimizing the permeability of the diverter pack. Additionally, a smaller bi-modal distribution of TDA-300 can be employed to provide far-field diversion, ensuring comprehensive coverage of the reservoir.

Moreover, TDA-300 is formulated to be fully degradable and soluble in both hydrocarbons and water-based fluids. This characteristic ensures that the diverting agent can be effectively deployed without causing long-term environmental impact. The rate of dissolution is carefully controlled to allow for proper mixing and pumping without degradation, maintaining the integrity and effectiveness of the TDA-300 throughout the operation.

In conclusion, the Temporary Diverting Agent TDA-300 plays a pivotal role in optimizing the efficiency and effectiveness of hydraulic fracturing and well stimulation operations. Its ability to provide temporary diversion, withstand high-temperature conditions, and adapt to various carrier fluids makes it a valuable asset in the oil and gas industry, contributing to enhanced reservoir stimulation and improved production outcomes.

Application

Effective diversion in initial fracturing and re-fracturing applications in both oil and gas wells

Effective performance in conventional and unconventional reservoirs

Sandstone and carbonate formations

Cased and open-hole intervals

Matrix acidizing, acid fracturing and hydraulic fracturing

Features and benefits

Wide particle size distribution

Ensure uniform stimulation coverage of the entire interval

Improves diversion performance in both near-wellbore and far-field applications

Delivers enhanced fracture density and complexity

Dissolves fully in water and oil

Returns to full production in short period of time

Ensures superior regain conductivity

Compatible with common mix water, stimulation fluids, and additives

Requires no special equipment

Compatibility

TDA-300 is compatible with all common fracturing fluids. A compatibility test is recommended prior to use with anionic and amphoteric additives.

Packing

50 pound bags or 1000 pound super sacks.

Regulatory information

Wear appropriate protective gloves when handling. Do not eat, drink or smoke in the workplace. Wash hands before breaks and after work. Remove contaminated clothing and protective equipment before entering eating areas. Provide appropriate exhaust ventilation at places where amounts of dust is formed. Use in a well-ventilated area. Store in dry , cool ,and well-ventilated place. Keep container tightly closed. For more information, please refer to SDS.

