

Fluid Loss Control Additive KDF027

1. Introduction

Serious fluid loss into formation rocks leads to differential sticking, formation damage and reduces well productivity. Fluid loss control additives are generally used in drilling fluid systems to minimize the fluid loss while drilling oil or gas wells.

KDF027 is a resin produced from a cross-linked sulphonated organic polymer. It has superior fluid loss control property at high-temperature and high-pressure conditions. KDF027 can also be used in concentrated brines with environmentally friendly nature. It provides synergistic effects while used together with other fluid loss control additives such as KDF037 and KDF047.

2. Physical Properties and Hazards

Additives	Form	S.G.	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH
KDF027	Dark-brown Powder	1.20-1.50	Soluble	-	Eyes	Dust	10(5%)

3. Chemical Properties and Application

The unique chemical nature (crosslinked and sulphonated) provides KDF027 superior performance in fluid loss control at HTHP conditions and high resistance to salt and cement contaminations.

The product does not contain any heavy metals therefore it is nontoxic and may be used in environmentally sensitive areas. However, effectiveness is reduced if the chloride ion concentration exceeds 50,000 mg/liter.

Chemical Nature: A resin produced from a cross-linked sulphonated organic polymer.

Temperature Stability: Stable to at least 177°C (350°F) in the laboratory.

4. Treatment

Additions in the range from 2 to 6 lbm/bbl (5.7 to 17.2 kg/m³) are typically enough for most drilling fluids.

5. Packaging

KDF027 is supplied in 25 KG multi-lined paper sacks.

Keep it away from extreme conditions such as places near flames or direct sunlight.