

Gelling Agent KWC020

1. Introduction

ChanPlug is remedial treatment technology for well repairs or other well problems including casing or liner leaks, unsuccessful primary cementing job, top of cement, water production, depleted zones or high fluid loss.

Gelling agent KWC020 is used in ChanPlug system to provide penetration matrix in ChanPlug treatment jobs. ChanPlug has the following advantages compared to conventional squeeze jobs:

1. Low fluid loss and high resistance to dehydration
2. Low viscosity but better fluid stability
3. Low gel set permeability and better gas or water tightness.

2. Physical Properties and Hazards

Additive	Form	S.G.	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH
KWC020	Gray Powder	3.05-3.25	Hydratable	Not Combustible	Eyes, Inhalation	Dust	N/A

3. Chemical Properties and Application

KWC020 is hydratable inorganic gelling agent in ChanPlug system. It is used together with KWC021 or KWC030 for engineering design of ChanPlug treatment. Particle sizing technology is also introduced in ChanPlug system to enhance the squeeze and water control treatment effectiveness of ChanPlug system. KWC020 can be used at wide temperature and density ranges, however, the application temperature for ChanPlug system is less than 200°F using low temperature fluid loss control agent and 200-300°F if using KWC030 and stabilizer KWC008.

KWC020 properties varieties from batch to batch and strongly influence ChanPlug performance. Laboratory testing is always required to confirm the compatibility of KCM053 with other additives before using ChanPlug systems.

4. Treatment

KWC020 is the framework material used in ChanPlug systems at concentration of 40-55 vol%. For longer gelling time design, inert extenders are generally used together with KWC020.

5. Packaging

KWC020 is supplied in plastic-lining bags with net weight of 25 kg/sack.

It should be stored in shaded areas with good ventilation. Keep it away from high temperature, humidity, and direct sunlight.