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(57) Abstract :

The present invention provides for an improved gel formulation and a process for preparing an improved gel formulation. The present invention provides for preparing a nano particle dispersion solution by mixing a silica nanoparticle solution with a brine solution. The present invention provides for adding a pre-determined quantity of polymer to the nano particle dispersion solution to prepare a polymer solution. The present invention provides for adding a cross linker to the polymer solution to obtain a gel formulation, wherein the gel formulation withstands a temperature of 1200 10 C at a high salinity of 60000 ppm

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