The presence of DAGs is related in many cases, to the increase of membrane permeability, thereby increasing the drug uptake and solubilizing, fill the gaps between the surfactant/cosurfactant and solidify the dispersion system therefore increasing the physical stability of insulin-loaded nanoparticles formula (Martins et al., 2007; Yi et al., 2013; Fatouros et al., 2007).

When DAG introduced in large amount, prevent the formulation of microemulsion or break the dispersion system. More specifically, no more than 2.5% is used for the preparation of dispersion system of the present preparation.