The application of emulsion gels as animal fat replacers in meat products has been focused on due to their unique physicochemical properties. Therefore, the emulsion gels (EGA and EGB) that favored the electrostatic protein–polysaccharide interactions are suitable to be used as fat replacers in meat products. Differential scanning calorimetry (DSC) revealed a single characteristic peak was detected in both the melting and cooling curves for all the emulsion gels, which indicated that the fat exists in a single polymorphic state. This study aimed to evaluate the physicochemical properties of emulsion gels using starch and gelatin as stabilizers, promoting electrostatic attraction via pH adjustment. There was no significant difference in proximate analysis, syneresis and thermal stability between samples, while EGA .and EGB had higher pH values than EGC.polymorph form