Propolis is a resinous substance collected by honeybees in order to cover and protect their beehives against the microorganism proliferation. They have commonly been used as a treatment to respiratory disease due their antimicrobial activity. In this work, an ethanolic extraction has been made for the propolis application to obtain and concentrate the major of essential substances. Ethanolic extract of propolis (EEP) has been used as a natural preservative in alimentary matrices and in this case, in “chorizos”, without thermal treatment. This has been made to replace some chemical additives as nitrites, which are potentially harmful to consumer health. Propolis action against common pathogen microorganism was evaluated. The diffusion method was performed to determine the effective concentration of the EEP against Salmonella sp, Clostridium sp, E. coli, and Staphylococcus aureus. Non significant differences among concentrations were observed (P<0.05). Three treatments have been made: (1) EEP 8mg/ml; (2) 0.2g/Kg of sodium nitrite; (3) ethanolic alcohol 96% without any preservative. These two preservatives have shown a similar effect, mesophilic and psychrophilic bacteria, total and fecal coliforms grown at the same rate (P>0.05). Comparing T1 with T2, pH decreased 1.04 and 0.33 respectively, TBA increase 0.26 and 0.249 mg respectively and BVT-N increase 21 and 22.1 mg respectively. Finally, sensory evaluation revealed that there are some differences in odor and color but the flavor is similar to the traditional product. The result of the work suggests propolis instead nitrites as a biopreservative alternative because the substances performances are essentially the same.