



## Evaluation Of Physical Properties Of Chitosan Active Membrane Loaded With Phytotherapeutic Extract And Silver Sulfadiazine

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**SUMMARY.** Polymeric membranes have been used as wound dressings for burns and healing wounds. Healing properties, anti-inflammatory and antibiotic in such membranes can be induced and/or made possible with the incorporation of bioactive as phytotherapeutic extract. In this work chitosan membranes were produced incorporating a commercial phytotherapeutic extract. The membranes were prepared by casting a chitosan solution and phytotherapeutic extract in a Petri dish and dried for 24 hs. We studied the effect of the concentration of the phytotherapeutic extract (PE) on membranes properties. Additionally, membranes were prepared with silver sulfadiazine (SS), an antibiotic ointment used for burns. The membranes were characterized for thickness, water vapor permeability rate, water uptake capacity, erosion degree and infrared spectroscopy. The results showed that the incorporation of low concentrations of extract promotes changes in the water uptake capacity and erosion degree, while high concentrations promote changes in the water vapor permeability.

**KEY WORDS:** Burns, Chitosan, Phytotherapeutic, Membrane, Silver sulfadiazine, Wound dressing.

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