



Republic of the Philippines
Department of Science and Technology

PHILIPPINE NUCLEAR RESEARCH



HYDROGEL DRESSING Tech Brief

This patented innovation is about polyvinyl pyrrolidone carrageenan hydrogel dressing for wounds, burns, and bedsores.

Through radiation processing, DOST-PNRI researchers have successfully developed a hydrogel dressing based on carrageenan and polyvinyl pyrrolidone. This dressing is intended to cover wounds, to absorb wound exudates, to protect wounds against abrasion, friction, and contamination.

The PVP-carrageenan hydrogel has several advantages, such as, abundance and availability of carrageenan as raw material, crosslinking and sterilization through radiation technology eliminates the use of toxic chemicals, more affordable than imported equivalents because raw materials can be locally sourced.



It is hypoallergenic, transparent, and soothing to wounds. It is tested on burns, diabetic ulcers, and bedsores in collaboration with medical doctors. As over the counter skin patch, it can also be aimed at vanity markets.

Interested takers are welcome to apply as partners who will manufacture and distribute this technology through a licensing agreement.