

LOW DERMA™ TECHNOLOGY ENHANCED GLOVES, A BETTER & SAFER ALTERNATIVE

Low Derma Technology enhanced synthetic gloves or best known as nitrile gloves provide a better and safer alternative to the products available on the market today. Low Derma™ has been granted the “Low Dermatitis Potential” claim 510(k) by the U.S. Food & Drug Administration (U.S. FDA) and to date, this technology has been endorsed by many market leaders in the glove industry as a breakthrough value-added enhancement to existing glove products which many deem as a commodity.

Low Derma Technology is a result of extensive research on its manufacturing process and chemical components.

Throughout the entire Research & Development and patent initiatives before its initial launch in 2016, as much as RM2 million was invested to bring Low Derma Technology to commercialization. One of the key success of this technology is the ability to manufacture nitrile gloves without the usage of sulphur and chemical accelerators (thiurams, thiazoles and carbamates), instead utilizing a unique cross-linking process in the vulcanisation of rubber. This process is a glove technology breakthrough compared with the conventional process of natural rubber and nitrile rubber latex gloves. To obtain the clearance through U.S FDA 510(K), the nitrile gloves enhanced with Low Derma™ Technology was tested using a Modified Human Draize Test 95 with a sample size of 200 non-sensitised adults. The results were favorable, showing low potential of chemical allergy.

This technology has also shown improvement in the tensile strength, durability and softness of nitrile gloves which may lead to better user-satisfaction.

Type IV allergy is mainly caused by chemical accelerators.

It is a type of delayed hypersensitivity, as the reaction takes between 6 to 48 hours to develop. Contact dermatitis, a Type IV Hypersensitivity results in symptoms such as redness, small blisters, crusty and scale appearance. According to glove industry data, starting from the year 1999, there has been a switch from natural rubber gloves to nitrile gloves due to the adverse allergic reaction caused by protein found in natural rubber latex gloves. However, this change has not resolved the issues of hypersensitivity among glove users. According to the research conducted at The Association of Peri-Operative Registered Nurses (AORN) 2010 Congress, 53.9% of 954 respondents still experienced allergy issues even after switching to non-latex gloves. Another study conducted by the Finnish Institute of Occupational Health (FIOH) stated

that the most common cause of occupational allergic contact dermatitis is due to rubber chemicals. Other trends show that 90% of glove-related allergic reactions are due to chemical accelerators used in the manufacture of gloves.

“We opine that this product would be popular, especially in developed countries, where users are more concerned about these health issues. “

Low Derma Technology’s ultimate aim is to be a glove technology that will allow glove users to feel SAFE with a CLEAN formulation that provides a more complete protection and prevention that will give them the Confidence in Pursuing Their Passion in work and their personal lives. Apart from creating greater values and benefits, Low Derma™ is a people-focused technology that prioritises on consumer’s expectations in order to create nitrile gloves that will gain widespread market acceptance.

“The journey of LOW DERMA™ Technology will continue with more novel developments that benefits glove users.”



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