How to apply Nanoskin ACT:

1. Wash the wound bed with normal saline carefully.



2. Apply 2-3 drops of Biogel Quanta activator into the wound bed.



- 3. Distribute the Biogel Quanta activator all over the wound bed.
- 4. Wait for 5 min.
- 5. Remove the Biogel Quanta activator with sterile gauze.



- 6. Reapply 2-3 drops of Biogel Quanta activator then distribute over the wound bed.
- 7. Then apply Nanoskin ACT over the Biogel Quanta activator on wound bed.
- 8. Remove the air bubbles and make sure of the direct contact to the wound bed.
- 9. Apply secondary dressing with sterile permeable materials.

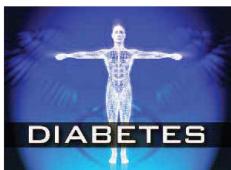
*note: in burn II cases you can apply Nanoskin ACT only.



The Ultimate Infection Wound Management Device







For colonized / infected wound treatment, oxygen releasing to the tissue.



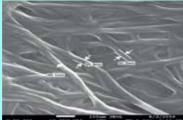
10x10 cm 5x5 cm



1. What is NANOSKIN® ACT?

• NANOSKIN ACT Is patented 100% natural Fiber polysaccharides made as biological film (a fiber scaffold of nano metric size) that is the result of years in researches in bio-nano-technology. These fibers are of high concentration of flavonoid compounds, diterpene, triterpene, lignans, phenylpropanoids and prenylated acetophenones to strengthen our immunity cells and improve our immune system. Moreover, contain substances such as β-glucan polysaccharide and significant amount of glucuronic acid, which acts physiologically in the body as an effective detoxifying agent.

• Nanoskin ACT complementary to the treatments.



Scanning **Electron Mircroscopy** of NanoSkin ACT Membrane

2. How it acts?

- Chronic non-healing wounds have an elevated alkaline environment. Healing occurs more readily in an acid environment which reduces the toxicity of bacterial end products such as ammonia, enhancing the destruction of abnormal collagen in the ulcer bed and promoting angiogenesis. NANOSKIN ACT natural extra cellular matrix release oxygen to the tissue reacting as a powerful antimicrobial agent. Also oxygen is a necessary component of normal wound healing and is required for multiple cell functions, including the killing of bacteria by leukocytes. However, the pH of the wound can affect many factors including oxygen release, angiogenesis, protease activity, and bacterial toxicity.
- Nanoskin ACT reacts as immunomodulatory action due to phenolic compounds from green tea.
- It also releases growth factors and cytokines which will draw inflammatory cells Neutrophils and macrophages into the injured area, Neutrophils and macrophages digest bacteria, releasing growth factors, cytokines, and proteases.
- NANOSKIN ACT also significantly promotes DNA synthesis and increase cell division due to the existence of fiberpolysaccharides, thus promote granulation.

3. NANOSKIN® ACT - Main Characteristics:

- 100 % natural
- Biocompatible and non-allergenic
- No adverse reactions
- No sensation of pain
- Perfect occlusion of the wounded area
- High capacity of liquid retention
- Not permeable to external liquids and contaminants
- Natural antibacterial barrier
- Quick reduction of the wounded area by approximately 95%.
- Cost effective
- Flexible in thickness
- Revitalizes and nourishes epidermal cells and the scalp.
- Repairs and prevents wrinkles while minimizing scarring on the skin;
- Stimulates cell proliferation in skin;
- Removes damaged epidermal cells;
- Can be conformed to irregular wound surfaces and Easy to be secured and applied
- Durable with long-term wound stability



1. Objectives/goals (BIOGEL QUANTA activator):

- Preventing or managing infection is to ensure the host's defenses are able to outcompete microbial pathogens, leaving microbes unable to thrive and proliferate.
- Prevention and management of infection benefit is that there is no risk of toxicity to healthy tissue or systemic

2. ACTIVE INGREDIENTS

- BIOGEL QUANTA activator is fiberpolysaccharides, these fibers are of high concentration of flavonoid compounds, diterpene, triterpene, lignans, phenylpropanoids and prenylated acetophenones to strengthen our immunity cells and improve our immune system
- Moreover, contains substances such as β-glucan polysaccharide and significant amount of glucuronic acid, which acts physiologically in the body as an effective detoxifying agent.
- BIOGEL QUANTA activator is considered to be a modifier of biological response due to its immunomodulator potential. When it is recognized by specific cellular receptors, have the ability to enhance the host's immune response. Other beneficial effects such as anticarcinogenic, antimutagenic, hypocholesterolemic and blood sugar reduction.

3. BIOGEL QUANTA activator Advantages:

- Provides conditions favorable to the healing process, demonstrated reduction in healing time;
- Significantly reduces signs of inflammation and/or infection/ colonization;
- Stimulates cell proliferation;
- Prevents damage to keratinocytes;
- Reduces the number of viable bacteria;
- It is a powerful antimicrobial agent that has low cytotoxicity and high tissue tolerance; (suppresses irritability and formation of allergies)
- Allows for better control of odors;
- Does not cause pain during application and/or removal;
- Ensures the healing process and wound healing;
- Removes damaged epidermal cells;
- Repairs and prevents wrinkles while minimizing scarring on the skin;
- Revitalizes and nourishes epidermal cells and the scalp(don't harm surrounding intact skin)

4. Target therapies:

RTA KNOCKED

OF THE RT LEG & FOOT

- Chronic wound
- · Infected wound.
- Diabetic foot ulcer
- Pressure ulcer
- Decubitus ulcers
- Radiation burns

INFECTED DIABETIC FOOT FOR AMPUTATION









BY CAR DEEP LACERATION OF THE LATERAL ASPECT



INFECTED ULCER





RFERENCE: https://doi.org/10.4236/jbnb.2018.91007

