## **NMBM Product Description**

Natural Matrix Biopolymer Membrane (NMBM) is an ointment in a form of emulsion (cream) for treatment of Diabetic Ulcer Wound care, non-invasive and external treatment that comes in contact with injured skin and acts as mechanical barrier managing the microenvironment of the wound.

The **NMBM** acts as a skin dressing ointment that enhances and supports all stages of healing in wound management. The ointment belongs to the group of "lipid bilayer membrane emulsions" and contains natural ingredients including waxes, sugar alcohols, osmoregulators, fatty and amino acids. **NMBM** is available in tube sizes ranging from 5g to 500g.

## Indication for use / Intended use

The NMBM supports the healing of acute and chronic wounds. The NMBM ointment is primarily intended to provide a moist, clean and anti-microbial environment, which supports the autolytic debridement for optimal wound healing. The product is non-invasive and intended for external use, acting as a mechanical barrier maintaining the microenvironment required for wound healing. The NMBM is indicated for light too severe wounds such as:

- Superficial wounds and abrasions
- Diabetic ulcers
- Pressure ulcers
- Venous leg ulcers (venous stasis ulcers, arterial ulcers and leg ulcers of mixed etiology)
- 1st and 2nd degree burns and blisters

Adding an aqueous phase, the ointment (hence forming a gel) generates a spreadable, membrane-like matrix, which preserves moisture and elasticity. The ointment may be applied several times per day to the wound area. Application should be initiated, instructed, guided and supervised by a professional healthcare giver (to be defined), both for inpatient and outpatient services.

## Product mode of Action

The product is intended to support the healing of acute and chronic wounds that have substantially breached the dermis.

The NMBM promotes and supports the autolytic debridement and healing of wounds by two mechanisms of action: low pH based on its amphoteric compound and high osmolality. The NMBM natural low pH helps to decrease the pH within the wound environment providing a pathway for the body's natural processes to improve and advance the wound's healing. The NMBM high sugar content acts like an osmotic engine facilitating the movement of liquids from the deep tissue layers to the wound surface. The fluids bate the wound, softening, liquefying and dimishing the slough and the eschar thus aiding and supporting autolytic debridement. Together the low pH and high osmolality aid the body's natural processes to cleanse away necrotic tissue and advance the healing.

The relief and healing process of the wound can be achieved by applying the ointment on the injured skin creating a "barrier" to isolate the contaminated environment, thus preventing the formation of new dermis. By providing an anti-microbial and moist environment the product allows the dermis to facilitate its regeneration and to create a healthy dermis leading to a complete wound closure. The wound heals by first being filled with granulation tissue, subsequently the epithelium grows back over the granulation tissue and the wound contracts.

