

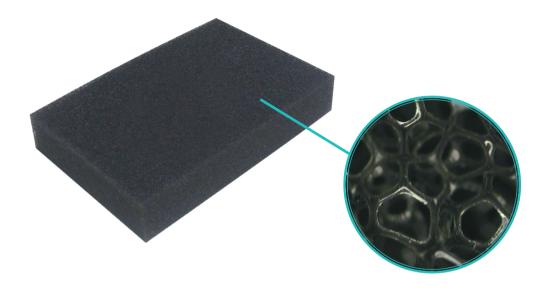


Bodyguard II

## SINGLE USE NEGATIVE PRESSURE WOUND THERAPY KIT

Cooperative / Innovative / Excellent

# **BIOCOMPATIBLE RETICULATED FOAM**



# Molecules in lower polarity, preventing the diffusion of bacteria with polarity.

Inhibition of inflammation, improving the efficiency of wound healing.

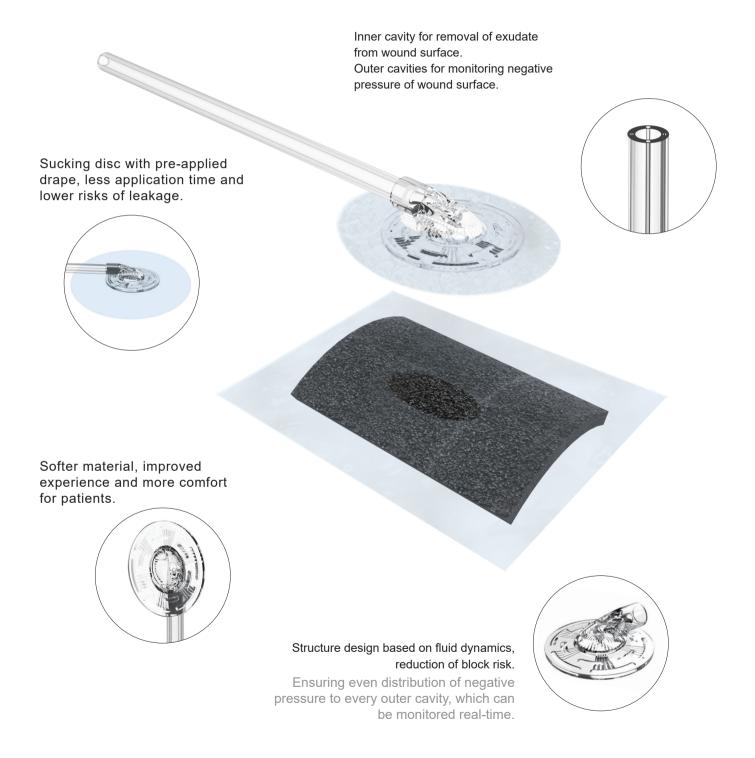
#### Uniform pore size of foam.

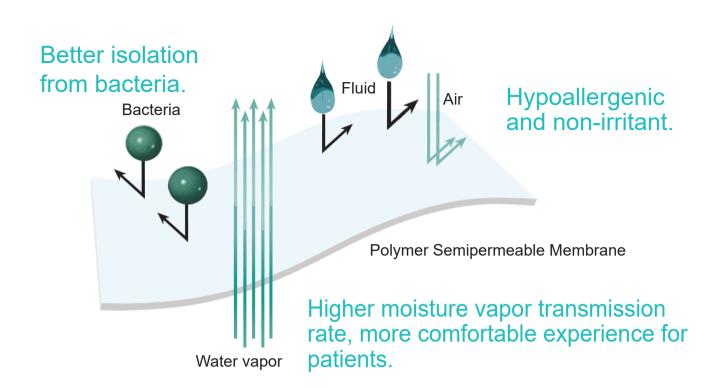
Complete contact with the wound surface for even pressure distribution.

#### Stronger van der Waals force between polymeric molecules, with thermosetting property, in stable structure which is not easy to be broken.

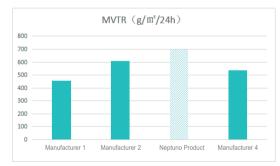
Easy to peel off and hard to be broken, with lower rate of residue.

# UNIQUE ALL-IN-ONE SUCKING DISC AND TUBING WITH LARGER INNER DIAMETER

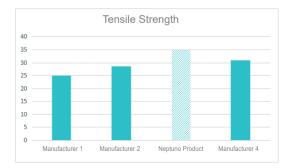


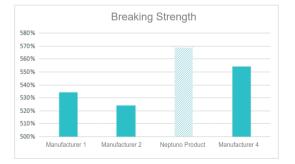


# **BIOCOMPATIBLE POLYMER SEMIPERMEABLE MEMBRANE**



Note: MVTR is short for moisture vapor transmission rate





The biocompatible polymer semipermeable membrane of Bodyguard is made by special process, in best proportion of polyurethane block copolymer, which ensures the best moisture vapor transmission rate. Meanwhile, it has the mechanic properties of tension, waterproofness, toughness and ageing resistance as excellent as polyurethane elastomer.

Bodyguard []

#### **Negative Pressure Wound Therapy System** (Wound Continuous Drainage Suction Unit)



- Design for dedicated use of lower negative pressure: -2.5kPa (-18.75mmHg)~-32kPa (-240mmHg).
- Two operation modes 'Continuous Operation' and 'Intermittent Operation', for'Intermittent Operation' mode the default setting of operation circle is 5min operation +2min pause, both number can be set between 1min and 15min.
- Better design with less noise, the noise are controlled under 50 dB (A), which will not disturb the patient in sleeping.
- Long life of use, capable of continuous work.
- Overflow protection device inside can prevent the exudate sucked from entering into the machine, avoiding the cause of secondary pollution.

#### **Negative Pressure Settings and Selections** of Mode for Treatment -

Wound Types	Negative Pressure Settings [kPa(mmHg)]	Selections of Mode	
Traumatic Wound			
Acute Phase	-8.0~-5.3 (-60~-40)	Continuous Operation or Intermittent Operation (2-3min operation + 1-2 pause)	
Not Acute Phase	-16.0~9.3 (-120~-70)	Continuous Operation or Intermittent Operation (3-5min operation + 1-3min pause)	
Acute Diabetic Foot Ulcer	-12.0~-8.0 (-90~-60)	Intermittent Operation (2-3min operation + 1min pause)	
Chronic Acute Diabetic Foot Ulcer	-9.3~-6.6 (-70~-50)	Intermittent Operation (2-3min operation + 1min pause)	
Other Chronic Ulcer (including Pressure Ulcers, Venous Leg Ulcers etc.)	-16.0~-9.3 (-120~-70)	Continuous Operation or Intermittent Operation (3-4min operation + 1-2min pause)	
Burn Wound			
Acute Phase of Deep Partial- thickness Burn Wounds	-12.0~-5.3 (-90~-40)	Continuous Operation or Intermittent Operation (3-5min operation + 1-2min pause)	
Not Acute Phase of Deep Partial-thickness Burn Wounds	-12.0~-8.0 (-90~-60)	Continuous Operation or Intermittent Operation (3-5min operation + 1-2min pause)	
Electric Burn Wound	-12.0~-8.0 (-90~-60)	Intermittent Operation (2-3min operation + 1min pause)	
Hot Crush Injury Wound	-12.0~-8.0 (-90~-60)	Intermittent Operation (2-3min operation + 1min pause)	
Flaps and Grafts			
Dermal Stent Implantation	-10.6~-6.6 (-80~-50)	Continuous Operation for 2 days or Intermittent Operation (4-6min operation + 1-2min pause)	
Auto-Epidermal Grafting	-10.6~-6.6 (-80~-50)	Continuous Operation for 2 days or Intermittent Operation (4-6min operation + 1-2min pause)	

## **Other Compositions**



Pad Drape

## **Clinical Mechanism of Negative Pressure Wound Therapy**

#### All-Directional Active Drainage

All-directional active drainage leads to the removal of bacteria culture media and toxic decomposition of wound injured tissue, reducing the organism tissue's reabsorption of toxic decomposition. It can help avoid uncontrolled systemic inflammatory response syndrome (SIRS), block the pathological reaction chain and prevent the happen of multiple organ dysfunction syndrome (MODS).

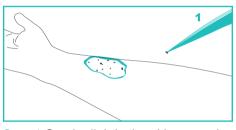
#### Safe and Effective Closure of Wound Surface

The semipermeable membrane constructs a sealed environment, preventing the bacteria from entering into the wound surface, meanwhile ensuring the moisture vapor transmission from the skin to the outside, leading the wound to closure.

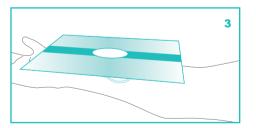
#### Promote Wound Healing

The controlled all-directional negative pressure provides power for active drainage, helping accelerate topical blood circulation and promote granulation tissue formation.

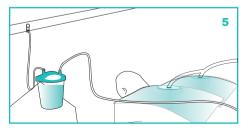
#### **Application Steps**



Step 1 Scrub slightly the skin around the skin after debridement.



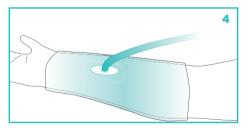
Step 3 Apply the sealing drape.



Step 5 Connect with the Negative Pressure Wound Therapy System (Wound Continuous Drainage Suction Unit), adjust the setting to the appropriate negative pressure.



Step 2 Cut and put together the foams and cover them over the wound, making sure the foams fit well.



Step 4 Place the sucking disc.

Optional Step Perfusion or drugs can be applied if needed, as the operation is easy and a better healing result can be obtained.



## Indications

#### Trauma & Orthopedics

- Open fractures
- All kinds of defect and damages of skin or soft tissues
- Avulsed wound or egloving injury
- Osteofascial compartment syndrome
- Chronic osteomyelitis and wound caused by amputation

#### Hand and Foot & Microsurgery

- Wound preparation before transfer of flaps
- Grafts
- Crush syndrome
- Chronic wounds, including diabetic foot ulcers

#### **Burn Surgery**

- Burn & scald, hot crush injury and high-explosive injury etc
- Extensive burns
- Deep second degree burn after eschar shaving and third degree burn after eschar excision (after shock period with vital signs stable)
- Wound surface after transfer of grafts

# General Surgery & Cardiothoracic Surgery

- Wound after radical operation of mastocarcinoma
- Wound after radical resection of rectal carcinoma
- Unhealing incision or stoma
- Chronic empyema, bronchopleural fistula and fistula of esophageal anastomosis etc

## Contraindications

- Patients with coagulation disorders or active bleeding.
- Cancerous ulcer wound.

## Complication

- The most common complications of Negative Pressure Wound Therapy are maceration of skin and eczema etc.
- There would be overgrowth of granulation tissue if the foam is covered over the wound for too long, which may cause bleeding of wound and damage to the tissue in removal of foam.
- It may cause infection if there were residual foam left in the wound tissue.
- Bleeding or even skin necrosis for lack of blood would happen if the setting of negative pressure were not appropriate.

## Precautions

- The foam should be maintained in collapse status in use of Negative Pressure Wound Therapy, in order to maintain a normal negative pressure distributed on the wound.
- Fold of skin should be prevented and smoothed when the sealing drape is applied, ensuring the sealing drape is applied to the skin firmly without any gap.
- The negative pressure should be set lower when the kit is used over wound with vessels or nerves exposed.

## **Product Specification**

Product Name	Specification		
Bodyguard II	15×5×3cm	15×10×3cm	20×10×3cm

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