The PROVEN 5-layer foam pressure ulcer prevention dressing¹

Unique construction, clinical evidence and economic proof make this your optimum choice for sacral pressure ulcer prevention

Mepilex® Border Sacrum



The PROVEN 5-layer foam pressure ulcer prevention dressing¹

Unlike other dressings, the proprietary Mepilex® Border Sacrum is the ONLY dressing with Deep Defense[™] technology, providing an optimal balance of strength and flexibility. This not only allows the dressing to provide optimal protection against shear in combination with other extrinsic factors, but also maintain its protective properties even with the absorption of sweat.²



Mepilex[®] Border Sacrum with Deep Defense[™] technology



Backing Film: Low coefficient of friction minimizes the impact of friction

and shear forces.³



Superabsorbent Retention Layer:

Enables internal movement within the dressing to limit transmission of shear forces.³



Spreading Layer:

Provides an optimal balance of strength and flexibility to protect the patient from tissue deformations, one of the primary causes of pressure ulcers.²



Absorption Layer:

Hydrophilic foam provides a cushioning effect, absorbing and limiting the transmission of pressure and shear forces.³



Safetac[®] Layer:

Safetac technology creates many contact points over the uneven surface of the skin.¹³

"The extent of the physical effects of a particular dressing varies with the properties of the materials it comprises, and also with the way that the dressing is constructed." - *World Union of Wound Healing Societies Consensus Document: Role of dressings in pressure ulcer prevention, 2016.*⁶

1 TRUTH. SCIENCE

Scientific validation

Finite element computational modeling (FEM) - recognized by the FDA for years in other context - has recently been validated by researchers for use in wounds. As a standardized engineering approach, FEM is an advanced computer simulation program that studies the impact of multiple forces on material stress and deformation. New literature supports FE modeling as a more clinically meaningful assessment of how a combination of extrinsic factors such as pressure, shear and friction together affect tissue deformations. This methodology is more clinically relevant than pressure distribution models that look at only one extrinsic factor in isolation, such as a steel ball on a hard surface.⁴

- Used to model internal strains and stresses in weight-bearing parts, including the heels and buttocks.
- Provides a realistic, anatomical representation of the human body with the ability to better simulate the complex movement of multiple tissue layers, each with different strengths and flexibility.
- Interface pressure mapping is a non-anatomical test methodology with little clinical relevance⁴
 - Maps the skin surface only
 - Ignores soft tissue deformations the primary cause of pressure ulcers
 - Ignores shear one of the primary causes of tissue deformations

Model of the impact of compression and shear in the muscles at the end of Day 1 when using FEM, a well-established, anatomic computer simulation methodology, built using MRI scans²



No dressing

Mepilex[®] Border Sacrum

Allevyn® Life Sacrum

Optifoam® Liquitrap Sacrum

Aquacel® Pro Sacrum

How conformability and durability deliver value

In addition to cost, hospitals must also take into account the cost effectiveness of dressings based upon strength and durability. Unlike other dressings, Mepilex Border Sacrum is not only stronger on Day 1, but it sustains its strength, even when wet.5 By maintaining its structural integrity, Mepilex Border Sacrum provides optimal protection from sustained deformations,² the primary cause for pressure ulcers. The structural integrity of other dressings is compromised once they absorb moisture;5 this may reduce their ability to protect against tissue deformations.²

Mepilex Border Sacrum vs Competitive Dressings⁵





External factors leading to pressure ulcers:









Getting to the root of HAPUs

Recent scientific investigations and computer-modeling technology have brought valuable new insights to healthcare systems seeking to reduce hospital-acquired pressure ulcers (HAPUs). One important new finding is that Stage 3 and 4 pressure ulcers originate from soft tissue deformations below the skin's surface.⁶ Damage from these deformities occurs initially at the muscle/bone interface and skin break down occurs late in the process, complicating prevention and diagnosis.⁶

Prophylactic dressings used as part of a pressure ulcer prevention protocol have been shown to offer significant benefits and are supported by a national clinical practice guideline.¹⁵ Because implementing and maintaining a pressure ulcer prevention program requires financial resources and clinician time, it makes good sense – and cents – to choose the right dressing.

Clinically proven Mepilex® Border dressings

Mepilex Border is the only five-layer foam dressing for which over 70 evidence pieces exist to support its effectiveness in preventing pressure ulcers.^{1,7-12} In fact, Mepilex Border is the only 5-layer foam dressing with 4 peer reviewed and published RCTs showing its isolated effectiveness in pressure ulcer prevention.⁷⁻¹⁰ Only Mepilex Border has RCTs demonstrating:

76% reduction in pressure ulcers (Santamaria et al⁷)

reduction in pressure ulcers



* Includes three international clinical guideline documents which incorporate recommendations based on available research and expert opinion. Although the guidelines are not brand specific, the underlying clinical evidence identifies only Mepilex Border and not Allevyn Life, Optifoam or Aquacel Foam.

Real-world health economic evidence¹¹

Mepilex[®] Border Sacrum is the **only** 5-layer silicone foam dressing with **real-world** health economic evidence in pressure ulcer prevention demonstrating a **\$77** reduction in per patient treatment costs resulting in a **64%** savings within a cohort of **1.03m** patients.

A recent 6-year observational study by William Padula, PhD, Johns Hopkins Bloomberg School of Public Health, examines the economic benefits of using Mepilex Border Sacrum dressings in pressure ulcer prevention. The study represents the largest real-world evidence to date in support of prophylactic foam dressings.

It examined Stage 3, 4 and unstageable hospital-acquired pressure ulcer outcomes in 38 academic medical centers (AMCs) and a cohort of 1.03 million high-risk patients between 2010-2015.

The average AMC saw a reduction of one reportable pressure ulcer (Stage 3, Stage 4 or unstageable) per quarter, saving four patients per year from serious pressure ulcers, as well as a potential **\$200,000 – 600,000** cost savings per hospital. Hospital-acquired pressure ulcers are common, costly and deadly – particularly Stage 3, 4 and "unstageable" pressure injuries (PSI-03), the effects of which cause approximately **60,000 deaths per year** in the U.S. and have an average **estimated cost of treatment ranging from \$500 to \$150,000.**¹¹

Treatment costs fell from **\$120** per patient to **\$43** per patient, and hospitals used **1-2 dressings per 5+ hospital days**







Mepilex® Border Sacrum with NEW user features

Uniquely designed for pressure ulcer prevention and management

While other dressings may look similar or claim to achieve the same results, they lack the characteristics and depth of clinical proof of Mepilex[®] Border Sacrum.



- Strength in the patient sliding/shearing direction² 1
- Flexibility in the horizontal direction² ↔

* Compared with original Mepilex Border Sacrum



Mepilex[®] Border Sacrum Ordering Information[‡]

Product Code	Size	HCPCS
282055	6.3" x 7.9" (16 x 20 cm) - 10 pack	A6213
282455	8.7" x 9.8" (22 x 25 cm) - 10 pack	A6213

‡ Packaged sterile in single packs

References: 1. Nahla Tayyib, RN, MN, BN, Fiona Coyer, RN, PhD, MSCNsg, CritCareCert, PGCEA. Effectiveness of Pressure Ulcer Prevention Strategies for Adult Patients in Intensive Care Units: A Systematic Review. Worldviews on Evidence-Based Nursing, 2016; 00:0, 1–13. 2. Alten. Finite element analysis studying the effect of different prevention dressings on protecting soft tissues from high stresses and deformation. Ref No. 001. Data on file. 2017. 3. Call E. et al. Enhancing pressure prevention using wound dressings: What are the modes of action? International Wound Journal, July 30 2013. 4. Gefen A., Kottner J., Santamaria N. Clinical and biomechanical perspectives on pressure injury prevention research: the case of prophylactic dressings. Clinical Biomechanics 2016; 38: 297-34. 5. Nölhylocke Health Care. Test Report – Tensile strength of dressings with different Moisture levels. LIMS ID: 2016/0808-0003-appl. 4. World Union of Wound Healing Societies (WUWHS). Consensus Document: Role of dressings in pressure ulcer prevention. Wounds International, 2016. **7.** Santamaria, N., Gerdtz, M., Sage, S. et al. A randomised controlled trial of the effectiveness of soft silicone foam dressing to prevent pressure ulcers in the intensive care unit. Am J of Critical Care 2016; 25: 6. (108-11). **9.** Oliuli, B., Olingyu, J. (Dostervation on effect of Mepita on the prevention and treatment of pressure isong to prevent pressure ulcers in the intensive care unit. Am J of Critical Care 2016; 25: 6. (108-11). **9.** Oliuli, B., Olingyu, J. (Dostervation and Prester Pressure and the effectiveness of a prophylactic dressing on prevention and treatment of pressure injuries. Wound Practice and Research 2017; 251: 1.24. 3. **11**, Patula WV. The Real-World Effectiveness and Value of Sacral Dressings to Prevent Hospital-acquired Pressure Injuries in Academic Medical Unstress and SaVex Spring 2017. **12**. Molhycke Health Care report: GMCS/2017/102/V4. Results to literature search for pressing in a conference posters relating to dressings for p

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