



Human BioSciences, Inc.

The Kollagen™ Technology Difference

*DEVELOPER *MANUFACTURER *DISTRIBUTOR *MULTINATIONAL COMPANY

About Us

- We are a multinational specialty biotechnology company focused on collagen-based products.
- We have been a developer, manufacturer, and distributor for 30 years of advanced wound care collagen products.
- Our products are FDA cleared and ISO certified.
- We believe every patient matters and provide quality products at lowest cost.

What is Collagen?

- Collagen is the most abundant protein in the human body and is a major component of the extracellular matrix (ECM).
- Over 20 different types of collagen have been identified in humans.
- The main types are type I, II, and III
- Together they make up 80% of the body's collagen.
- Type I and III are important for wound healing.

What is the Role of Collagen in Wound Healing?

Collagen works in every phase of wound healing that helps wounds move towards healing.

- Hemostasis
- Inflammatory
- Proliferative
- Remodeling

Wound Healing Phase Activity

- Platelet activation at the site of injury
- Recruiting factors for clotting events
- Activating cofactors for thrombosis
- Preparation and Cleansing of Wounds
- Attracting macrophages and monocytes
- Activating macrophages at the injury site
- Attracting plasma components
- Removal of bacteria and debris by phagocytosis and absorption
- Acts as a matrix for epithelial cells to move across the wound surface
- Actively promotes cellular differentiation and keratinocyte migration
- Initiates attachment of epithelium to dermis by acting like a glue

What are Collagen Dressings?

- Not all collagen technologies are the same.
- Native intact collagen provides a natural scaffold for new tissue growth.
- Collagen dressings provide the wound with an alternative collagen source.
- Reduction of high levels of MMPs

Indications for Medifil® II and Skin Temp® II

- Arterial Ulcers
- Venous Leg Ulcers (VLUs)
- Diabetic Foot Ulcers (DFUs)
- Pressure Injuries (PIs)
- Surgical Wounds
- Trauma Wounds
- Donor Sites
- Atypical Wounds
- Other
- Superficial, Partial, and Full Thickness Wounds

PARTIAL THICKNESS WOUNDS

- Superficial wounds: scrapes, abrasions
- Stage 2 Pressure Injury
- Skin Tears
- Arterial ulcers
- Venous ulcers
- Diabetic ulcers
- Scalds, Second-degree burns
- Moisture Associated Skin Damage/Incontinence Associated Dermatitis

FULL THICKNESS WOUNDS

- Stage 3,4 Pressure Injuries
- Unstageable Pressure Injuries with scattered slough/eschar
- Skin Tears
- Arterial ulcers
- Venous ulcers
- Diabetic ulcers
- Donor sites
- Dehisced Surgical Wounds
- Trauma wounds healing by secondary intention

Contraindications for Collagen Dressings

- Third-degree burns
- Sensitivities to bovine (cattle)

KOLLAGEN TECHNOLOGY PROPRIETARY BLEND PRODUCTS

- Medifil® II Collagen Particles (*1-gram vial or pouch*)
- Skin Temp® II Collagen Sheets (*2x2, 3x4, 7x7, 8x12*)
- Collatek® Collagen Gel (*1 oz, 3 oz*)

What is our Product Made of?

- 100% NON-HYDROLYZED TYPE I NATIVE BOVINE COLLAGEN
- We keep the collagen molecule intact and in its *purest* form.
- Our products are *natural* and compatible with topical agents and dressings.

Medifil® II Collagen Particles Features

- Medifil® II is 100% non-hydrolyzed type 1 bovine native collagen particles
- Proprietary Kollagen™ technology process protects and retains collagen molecule
- Stability of the molecule and scaffolding through all four phases of wound healing
- Absorbs 40-60 times its weight in fluid
- Used in hard-to-reach areas or any location

Application of Medifil® II

- Cleanse the wound per physician order.
- Apply Medifil® II particles ¼ inch to entire wound bed surface, including any undermining and or tunneling.
- Cover the wound with a secondary absorbent dressing to promote thermoregulation and maintain an optimal moist wound healing environment.
- Frequency of dressing change is based on exudate amount, clinical findings, and per physician recommendations.

Skin Temp® II Collagen Sheets Features

- Skin Temp® II is 100% non-hydrolyzed type 1 bovine native collagen.
- Proprietary Kollagen™ technology process protects and retains significantly more native triple helical protein structure
- Superior stability of the molecule and scaffolding through all four phases of wound healing
- 2x2, 3x4, 7x7, 8x12 sizes

Application of Skin Temp® II

- Cleanse the wound per physician order.
- Remove the backing of collagen sheet. Apply Skin Temp® II collagen sheet to wound bed surface, including any undermining and or tunneling.
- Collagen sheets may be moistened with tap water or saline in dryer wounds.
- Cover the wound with a secondary absorbent dressing to promote thermoregulation and maintain an optimal moist wound healing environment.
- Frequency of dressing change is based on exudate amount, clinical findings, and per physician recommendations.

Contact Info:

Cheryl Carver, LPN, WCC, CWCA, DAPWCA, FACCWS

Director of Global Education & Training

Human BioSciences, Inc. USA

Cheryl@humanbiosciences.com

Selvam J. Watts

International Sales Manager & Clinical Studies Associate

Human BioSciences India Ltd.

selvam@humanbiosciences.com



Our **Kollagen™** technology sets the standard for **Wound Care**



based on intact collagen – the body’s natural healing material

SkinTemp® II Collagen Sheets

Bovine collagen scaffolds bioengineered with our proprietary Kollagen™ technology with a non-woven fabric backing for easy application



HCPCS: A6021, A6023

Indications:

SkinTemp® II Collagen Sheets are indicated for the management of burns, scrapes, blisters, sores, ulcers, acute & chronic wounds; superficial, partial & full-thickness wounds; non-infected & infected wounds; minimal to heavily exudating wounds.

Precautions:

- SkinTemp® II should not be used on third-degree burns.
- All open and unused portions must be discarded.
- Do not use if sensitive to materials of bovine origin.

Medifil® II Collagen Particles

Bovine collagen fibers bioengineered for advanced wound care applications using our proprietary Kollagen™ technology



HCPCS: A6010

Indications:

Medifil® II Collagen Particles are indicated for the management of burns, scrapes, blisters, sores, ulcers, acute & chronic wounds; superficial, partial & full-thickness wounds; non-infected & infected wounds; minimal to heavily exudating wounds.

Precautions:

- Do not pack the wound tightly; allow for expansion of the particles.
- Apply collagen particles 1/4" to entire wound bed surface area.
- Medifil® II is insoluble collagen and should never be used as an injectable soluble collagen.
- All open and unused portions must be discarded.
- Do not use if sensitive to materials of bovine origin.

All products are reimbursable in the USA

HUMAN BIOSCIENCES, INC. • 940 Clopper Road, Galthersburg, MD 20878 • 888 - KOLLAGEN (888-565-5243) www.humanbiosciences.com • Info@humanbiosciences.com