FABRIFOAM® PRODUCTS FABRIC/FOAM COMPOSITE
HISTORY OF USE

Applied Technology International Ltd. is the creator and manufacturer of Fabrifoam®. Fabrifoam Products was incorporated in 1990 to commercialize the development of a unique and proprietary fabric/foam composite for orthopedic/musculoskeletal care.

Fabrifoam's materials use high quality, specifically engineered medical grade, hook-receptive nylon/spandex fabric blends coated with an open-cell hydrophilic urethane. Our proprietary foam is latex-free, neoprene and phthalates free. It is extremely soft, breathable, non-migratory, moisture wicking, easy to apply, comfortable to wear, provides adjustable compression and contains no organic rubber proteins.

Fabrifoam was initially developed for use in podiatric medical devices. The company's first branded product, The PSC™ was introduced to the market in 1992. It is made from our ProWrap™ material, the first of the Fabrifoam materials. It is our heaviest weight nylon spandex material with a medium degree of 2-way stretch. It was designed to reposition and hold the foot in the correct alignment to treat plantar fasciitis. Almost 30 years later it is still used by podiatrists worldwide. It is also cited in podiatry textbooks as a treatment option, including Principles and Practice of Podiatric Medicine 2nd Edition (1) and Fixing your Feet by John Vonhof (2). Fabrifoam's PSC device is also mentioned in numerous peer-reviewed articles for its unique ability to support fallen arches while being extremely comfortable and skin-friendly to wear.

After the success of the PSC and ProWrap the company subsequently, in the late 90's and early 2000's, launched other materials including MediWrap™, NuStimWrap™, SuperWrap™, Enthera™ and X-treme™. All of these materials use the same foam formulation but with a variety of substrates which provide varying degrees of stretch and recovery. They are designed to offer compression, support, bracing, repositioning and cushioning for injury/ailment therapy and prevention protocols.

In 2016, Fabrifoam launched its GuardION® line of compression products. Based again on Fabrifoam's foam formulation, it incorporates the infusion of natural additives which have the ability to release Far IR. Far Infrared rays are proven to increase blood flow and aid in healing (3).

To date, there are hundreds of patents and peer-reviews on Fabrifoam's proprietary fabric/foam materials. The materials are used worldwide by medical professionals for treatment from neonatal to geriatric care.

Among the many medical applications are:

- Lymphedema care
- Respiratory therapy
- Podiatric care
- Physical therapy
- Occupational therapy
- Sports therapy
- Post-surgical care
- Pediatric & neonatal care
- Chiropractic care
- Veterinary therapy

Fabrifoam was tested for the Primary Dermal Irritation in Rabbits (ISO) study and ISO Closed Patch Skin Sensitization Study on Guinea Pigs and passes both Biocompatibility Testing with no reactions. Fabrifoam also passes phthalates testing for California Proposition 65. We are in compliance and certified for 21 CFR Part 820 for cGMPs.

In addition to the Fabrifoam brand, we specialize in developing new and innovative materials and products to meet the growing needs of the medical markets. We work closely with many customers and OEM manufacturers to develop and produce devices and components that utilize our advanced materials.

Reference Page

Products Made from Fabrifoam®

Fabrifoam Website
www.fabrifoam.com

North Coast Medical – Their custom products made with Fabrifoam
https://www.ncmedical.com/live_search.php?q=Fabrifoam

Ultrawrap Athletic bandage from Rite Aid made with Fabrifoam
https://www.riteaid.com/shop/ra-ultra-soft-wrap-4in-0358263

Neo Natal Infant and newborn CPAP using Fabrifoam component parts
https://circadiance.com/wp-content/uploads/2016/01/CircadianceNeoPAPInformationManual.pdf

Studies, Reviews, Applications for Fabrifoam

NIH Study – SuperWrap to secure tracking device.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2729397/

Peer Reviewed Article from Harvard University- Exoboot study – made from Fabrifoam component parts.
https://biodesign.seas.harvard.edu/files/biodesignlab/files/2018_chung_biorob_-_exoboot_a_soft_inflatable_robotic_boot_to_assist_ankle_during_walking.pdf

ProWrap – Springer study for stroke rehab with The Able System. Using Fabrifoam to secure meters.
https://link.springer.com/article/10.1186/1471-2377-13-93

NIH Study – Shoulder Repositioning in infants. Using SuperWrap for splinting.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4022961/

Osteoarthritis – Knee Arthritis study. SuperWrap used to secure electrodes.
https://www.sciencedirect.com/science/article/pii/S1063458404000901

Therapy Use – Seminar on how to use SuperWrap in cerebral palsy applications
https://www.motivationsceu.com/product-page/7331-introduction-in-the-use-of-fabrifoam

Footnotes from page one:

(1) Leonard A. Levy and Vincent J. Hetherington, 2006, published by Data Trace Publishing Co., Chapters 34 & 35.
(2) John Vonhof, 6th Edition, June 2016 published by Wilderness Press, page 286
(3) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3699878/