

## PREMIUM INSULATION

TECHNOLOGY



WWW.G-LOFT.EU











#### WHAT IS G-LOFT?

Warm, light and breathable - even in extremely wet and cold weather: The revolutionary G-LOFT® insulation meets the highest standards and combines the benefits of natural down with the ruggedness of a synthetic fiber. And it is permanent. Due to the "MEMORY EFFECT" the fibers automatically return to their original and unique shape, providing warmth, even after repeated washing and hard use. G-LOFT® guarantees optimal thermal insulation and heat regulation, both indoors and outdoors.



































#### TECHNOLOGY



#### BI-COMPONENT-FIBER

The G-LOFT® bi-component-fiber is permeated with a micrometer fine air channel. As a hollow fiber, it ensures as in nature the fur of polar bears, for optimum thermal insulation. The fiber consists of two different materials, which contract to varying degrees during cooling after spinning process. This creates a spiral shape - like a spring - which is permanently fixed in the molecular structure. Due to the "MEMORY-EFFECT" the G-LOFT® insulation returns always to its particularly warm, airy original shape.



#### SPECIAL FIBER BLEND

Whether duvet or outdoor apparel: Depending on the nature of the final product, the G-LOFT® bi-component-fibers are combined with a specific mix of micro- and melting fibers (Low-Melt-Fibers). The microfibers as full fibers provide a flatter structure and thus a smaller pack size. The low-melt-fibers are responsible for the lightness and flexibility of the G-LOFT® insulation: Thanks to THERMO-BONDING the outer shell merges with the other fibers, thus ensuring a permanent & soft loft.

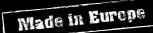


#### NATURAL CLUSTERING

The G-LOFT® fibers form within the insulating layer, so-called "clusters", as they are also found in high-quality goose down. Air is trapped in countless, small cushions, which provides an optimum lasting insulation in all directions. Thanks to this unique for synthetic fibers clustering, the G-LOFT® fiber has similar thermal characteristics as the natural down filling. Unlike down, however, the G-LOFT® fiber dries very quickly after washing and returns immediately to its original airy shape.







#### BENEFITS



#### WARM & LIGHT

Independent studies have shown: The unique fiber technology gives the G-LOFT® insulation an unrivaled warmth to weight ratio. The extremely hollow fiber causes a drastic reduction in specific weight and optimal thermal insulation. G-LOFT® is thereby noticeably lighter and achieves a proven higher heat output at the same weight as other insulation materials.



#### HIGHLY COMPRESSIBLE

G-LOFT® products are highly compressible. Through the good fluffiness the G-LOFT® insulation traps air that can escape during packing and storage of sleeping bags, blankets etc. Due to the "MEMORY-EFFECT" the spiral structure of the G-LOFT® fiber remains permanently and the soft loft builds up quickly again after unpacking.



## TOP WET CONDITION PERFORMANCE

Emulating nature. The G-LOFT® fiber combines the advantages of natural down with the insensitivity of the synthetic fiber. Unlike down the G-LOFT® synthetic fiber does not absorb moisture itself and thus guarantees a very high thermal output even in wet conditions. G-LOFT® products are optimally suited for use in wet and cold areas.

# GeLOFI



#### HIGHLY BREATHABLE

Thanks to the natural cluster structure the G-LOFT® insulation is particularly breathable. The air can circulate without withdrawing heat, an optimum moisture transport is guaranteed and the body stays warm and dry. Thus, the G-LOFT® products guarantee a perfect temperature control in the outdoor area and for optimal sleeping comfort in the bedding sector.



#### **EASY CARE**

G-LOFT® products can be washed in conventional washing machines without sacrificing performance. Due to the "MEMORY EFFECT" the fibers always return to their original spiral structure and guarantee even after several washes lasting loft and optimal thermal insulation. Due to the ease of maintenance, the G-LOFT® fiber is particularly suitable for allergy sufferers!



#### FLAME RETARDANT

G-LOFT® FRi was specially developed for processing in protective clothing and equipment. In addition to the excellent flame retardant properties, G-LOFT® FRi offers also an excellent thermal protection and has thus simultaneously a high fill power and flexibility. Tested according to DIN EN ISO 14116.

#### PRODUCT PORTFOLIO

#### APPAREL & EQUIPMENT



SOFT INSULATION



COMPACT



HIGH INSULATION



STABLE INSULATION



FLAME RETARDANT

#### **FOOTWEAR**





NEEDLED & THERMOBONDED INSULATION

BEDDING



INDIVIDUAL INSULATION & QUILTED CONSTRUCTION



QUILTED CONSTRUCTION



QUILTED CONSTRUCTION DESIGN



INDIVIDUAL CUSTOMIZED INSULATION

#### APPAREL & EQUIPMENT



## Si SOFT INSULATION

The best G-LOFT®ever! In the development of G-LOFT®Si special attention was paid to the optimum warmth to weight ratio. In addition, an ecologically clean and above all durable melting fiber bonding guarantees a long-lasting loft.





## COMPA

G-LOFT® Ci has been specifically designed as insulation for fashion clothing, for which the use of a very compact insulation is required. Another advantage is that G-LOFT® Ci can also be used in combination with very open materials.





## HIGH INSULATION

That's something you can rely on. The millionfold proven **G-LOFT® Hi** is particularly suitable for rugged and thus often also slightly heavier outdoor fabrics. It is designed for heavy use and reliably brings its performance - in any situation!





## STABLE INSULATION

For the production of this fiber a combination of extremely fine micro-fibers is used. In addition, the high proportion of melt fibers causes maximum stability with outstanding warmth-to-weight ratio. **G-LOFT® STi** is the optimum insulation for applications in gloves, work gloves and products which must guarantee excellent stability and very good grip.





## FLAME RETARDANT INSULATION

"Safety first" is the motto. **G-LOFT®FRi** was especially developed for processing in protective clothing and equipment. In addition to the excellent flame retardant properties, G-LOFT® FRi has also excellent thermal protection properties and has thus simultaneously a high fill power and flexibility. Tested according to DIN EN ISO 14116.

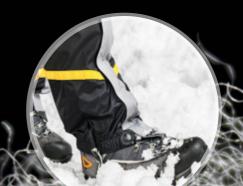


#### **FOOTWEAR**



## NEEDLED INSULATION

**G-LOFT® Ni** is a special, needled insulation which was developed for use in high-quality shoes and boots. The innovative fiber mixture of different microfibers makes the material not only moisture resistant, but also very warm and flexible. G-LOFT®Ni ensures also a comfortable fit.





### NEEDLED & THERMOBONDED INSULATION

**G-LOFT® NTi** is a special, needled and thermally treated insulation, which is suitable as an optimum sole insulation for use in high-quality shoes and boots. The material is also moisture resistant, especially warm and ensures a comfortable fit. In addition, G-LOFT® NTi is quick-drying and durable.

#### BEDDING



## AIRY INSULATION

**G-LOFT® Ai** combines maximum softness (light & fluffy) with the highest product standards. At G-LOFT® Ai high quality natural raw materials are processed in the most modern way. This mixture of special premium fibers was especially developed for the use in the bedding area and guarantees optimal sleeping comfort.



#### QUILTED CONSTRUCTION



## QUILTED CONSTRUCTION

**G-LOFT® QC** extends the product range of G-LOFT® to the possibility of producing custom-made quilted designs exactly according to customer requirements. All products are manufactured in our factories in Europe in premium quality. The heart of every quilt construction, is the optimal G-LOFT® insulation for the final product. On request Scrim or Thermoflect can optionally be processed. Especially for professional fields G-LOFT® QC quilted constructions are also available in a flame retardant version.





## QUILTED CONSTRUCTION DESIGN

G-LOFT® QC Design through innovative technology offers the possibility of quilting the ready cut parts, which subsequently only need to be cut out from the roll material afterwards.

This production type brings the following advantages:

- Free design of topstitching
- Efficient cutting layer
- Dimensional stability
- Crop marks are already quilted
- Easier further processing by pre-completion seams
- Optional attachment of quilted logos
- Fewer seams on the end product
- Significantly fewer working minutes required in post process
- Higher quality of the end product













