

Thinsulate  
INSULATION

3M

TypeTHL



# H I G H L O F T A N D L O W W E I G H T

FOR SUPERIOR WARMTH



high loft

odourless & hypoallergenic

high insulation level



**Thinsulate**<sup>™</sup>  
INSULATION

Anything else leaves you cold.

**Lightweight and warm**

Thinsulate™ Insulation THL is a high loft construction for extra volume, light weight and warmth. A high insulation level plus excellent hand and drape, suitable for various applications such as accessories, bedding, sleeping bags and all types of outerwear where warmth and light weight matters. Thermal fibre linking with no additional binders provide a hypo-allergenic odourless insulation.

**Ecological Statement**

Type THL contains no harmful substances according to Oeko-Tex-Standard 100 and has been awarded with the Oeko-Tex-Certificate by Hohenstein Institutes



**Care Instructions**

Can be machine washed according to care instructions.



- Never store in compressed state
- Store away from heat
- To revitalize loft, tumble dry low
- During regular drying, reposition article in dryer frequently to achieve uniform drying.

**Typical properties**

TYPE	THICKNESS [cm]	WEIGHT [g/m <sup>2</sup> ]	WARMTH Rct [m <sup>2</sup> K/W]	LENGTH [m]	WIDTH [m]
THL - 1	1,4	70	0,30	45	1,52
THL - 2	1,9	102	0,47	27	1,52
THL - 3	3,5	162	0,71	22	1,52
THL - 4	4,0	211	0,79	18	1,52

1 Clo  $\hat{=}$  0.155 Rct [m<sup>2</sup> K/W]

Data generated by 3M Laboratories (Europe) with 3M Thickness Tester, acc. to ISO 9073-1 (1989) and ISO 11092 (1983).

THL-1, THL-2 and THL-3 are also available in 2,28 m width.

**Composition**

**THL-1 and THL-2:** 77,5 % Polyester, 22,5 % Polypropylen  
**THL-3:** 83 % Polyester, 17 % Polypropylen  
**THL-4:** 87 % Polyester, 13 % Polypropylen

**Garment Construction**

Unlike down, Thinsulate™ Lite Loft™ Insulation may be used with any fabric. It is the garment or accessory manufacturer's responsibility to thoroughly test for suitability to the application. Waterproof breathable systems and micro-coated fabrics can be abrasive to insulation. Thorough testing is recommended. Check before using light coloured and translucent fabrics if Thinsulate™ Insulation is showing through and whether appearance is suiting the intended design. It can be quilted or free-hung depending on manufacturer's preference – THL-4 only for quilted applications. Determine compability of fabrics and Thinsulate™ Insulation in order to provide a high quality, technically functional garment to the end user. Please consult with your Insulation Products account representative for details. Slightly varying surface appearance does not affect the performance and specification of the product. For resistance against chemicals, fire and radiating heat and behaviour together with electrical current please contact 3M for advise.

**Please also study our PBUS document which gives useful advice about product and brand usage standards.**

**Important Notice to Purchaser/ User**

All statements, technical information and recommendations herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed. Before using, user must determine the suitability of the product for its intended use and user assumes all risk and liability whatsoever in connection therewith. Check before using light coloured and translucent fabrics if Thinsulate™ Insulation is showing through and whether appearance is suiting the intended design. Factors such as garment construction, wearer's physical condition and ambient conditions may require different insulation levels. All product performance values stated on Thinsulate™ Thermal Insulation Product Data Sheets are determined before shipping. Storage, handling and shipping may effect the performance levels of the insulation. All statements, technical information and recommendations herein should not be used for tenders and specifications. To validate submitted data please contact 3M. All technical data stated are typical values, but due to the nature of non woven textiles and therefore to the variation of results, they can not be guaranteed. All applications need to be in accordance with our PBUS regulations in order to ensure proper Product and Brand Usage. All questions of warranty and liability relating to this product are governed by the terms of the sales subject where applicable to the prevailing law.