

Thinsulate  
INSULATION

3M

Type C/CS/CDS



# H I G H P E R F O R M A N C E A N D S L I M L I N E

EXCELLENT **F R E E D O M** OF MOVEMENT

Type C/CS/CDS

thin and warm  
excellent breathability  
comfort to the wearer



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

Anything else leaves you cold.

**Lean and warm** Thinsulate™ Insulation Type C is the perfect insulation material for general outdoor, sportswear, professional and work wear clothing, where a thin, warm and compressible insulation is important. It is also very suitable for accessories such as gloves and hats. Thinsulate Insulation Type C is an insulation which is almost one and a half times warmer than down, when equal thickness is compared. Easily incorporated into clothing and accessories, the lack of bulk combined with the excellent breathability gives freedom of movement and comfort to the wearer. It is available in Type C, CS and CDS.

**Ecological statement** Type C 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



**Typical Properties**

TYPE	THICKNESS [cm]	WEIGHT [g/m <sup>2</sup> ]	WARMTH* Rct [m <sup>2</sup> K/W]	LENGTH [m]	WIDTH [m]
C 40	0,4	44	0,12	318	1,52
C 70	0,6	77	0,15	183	1,52
C 100	0,7	114	0,18	128	1,52
C 150	0,9	164	0,24	91	1,52
C 200	1,1	215	0,31	64	1,52
C 250	1,6	268	0,40	55	1,52

\* results generated on CS or CDS types  
1 Clo  $\hat{=}$  0.155 Rct [m<sup>2</sup> K/W]

Data on performance generated by Hohenstein Institutes acc. to ISO 9073-2, EN 12127 and ISO 11092.



**Composition** 65 % Polypropylen, 35 % Polyester

**Garment Construction** **Type C – no scrim:** for quilting width of 10-18 cm or adhesive laminating.

**Type CS – single scrim:** construction guidelines allow up to 30 by 45 cm panels or in quilting width of 10-25 cm.

**Type CDS - double scrim:** pre-quilted in 15 cm width, allowing insulation to be free hung or edge stabilised. Single scrim weight: 17,5 g/m<sup>2</sup>. Please derive weight for the corresponding CS and CDS Types not listed.

Check before using light coloured and translucent fabrics if quilt lines show through and whether the general appearance of Thinsulate™ Insulation is suiting the intended design. Scrim products are especially designed to protect applications build by shell fabrics or linings that might provoke fibre migration. 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.