DATA SHEET: **POLAR BUFF®**

GENERAL DESCRIPTION

- A seamless Thermolite® tubular fabric sewn to a Polartec® tubular fleece fabric.
- A versatile product to protect the user against the affects of cold environments to help maintain body temperature.
- Product certified according to EN ISO 13688/13 and the UNE-EN 14058/04 standard, which classifies it as a PPE Thermal Resistance Class 1 product (UNE-EN 31092:1996/ A1:2013) and also as belonging to Air Permeability Class 1 (UNE-EN ISO 9237:1996).
- Combats heat loss.
- Maintains body temperature in cold weather.
- Some designs incorporate two 3M Scotchlite™ retro-reflective stripes for enhanced visibility in poor light conditions.
- Polygiene® treatment on Thermolite® fabric, that allows the fabric to remain cleaner for longer avoiding bacterial growth and stops odors.

CERTIFICATIONS

CE CAT I
EN ISO 13688/13

UNE-EN 14058/04
1 1 x x x

KEY FEATURES

MULTIFUNCTIONAL | ODOR RESISTANT | POLAR FLEECE POLARTEC® | 100% SEAMLESS | MOISTURE MANAGEMENT | DRIES QUICKLY

DIMENSIONS

THERMOLITE

POLARTEC® Climate Control Fabrics™

FABRIC COMPOSITION

Material:	
POLYESTER	100%
Structure:	
Weft Knitting	
Single jersey	

PACKAGING

FABRIC TESTS

Properties: POLARTEC® Climate Control Fabrics™

Mass per unit area:
UNE-EN 12127:1998 — 168 g/m² ±5%

Air permeability:
UNE-EN ISO 9237:1996 — 948,89 mm/s ±10%

Thermal Resistance (RCT):
ISO 11092: 2014 — 0,0794 m²K/W ±10%

Water Vapour Resistance (RET):
ISO 11092: 2014 — 7,52 m²Pa/W ±10%

Determination of breaking Strength and elongation:
UNE-EN ISO 13934-1:2013

Average Load (N)		Average Elongation (%)	
Lengthwise	310 ±10%	Lengthwise	90 ±10%
Crosswise	130 ±10%	Crosswise	190 ±10%

Determination of dimensional change in domestic washing and drying:
UNE-EN ISO 5077:2008 + ERRATUM:2008
Washing procedure 3M (Ta=40 ±3°C) according to ISO 6330:2012
Lengthwise ≤5 % Crosswise ≤5%

Resistance to pilling (martindale, 2000 cycles):
UNE-EN ISO12945-2:2001 — 4-5
Scale from 1 to 5 in which 1 is “Very severe pilling” and 5 is “No pilling”.

Determination of the abrasion resistance of fabrics:
UNE-EN ISO 12947-2:1999/AC:2006
Testing pressure: 9kPa — 57500 cycles
Until the first yarn broken

Fastness rates:

Colour fastness to domestic and commercial laundering
UNE-EN ISO 105-C06:2010 — 4-5

Colour fastness to perspiration (Alkaline & Acid):
UNE-EN ISO 105-E04:2013 — 4-5

Colour fastness to rubbing (Dry & Wet)
UNE-EN ISO 105-X12:2003 — 4-5

Colour fastness to sea water
UNE-EN ISO 105-E02:1996 — 4-5

(Fastness rates in a scale from 1 to 5 in which 1 is “Poor behaviour” and 5 is “Good behaviour”.)

Colour fastness to artificial light
UNE-EN ISO 105-B02:2013 method 2 — 4-5

(Fastness to artifical light rates in a scale from 1 to 8 in which 1 is “Very poor” and 8 is “Excelent”.)

FABRIC TESTS

Properties: THERMOLITE

Mass per unit area:
UNE-EN 12127:1998 — 149 g/m² ±5%

Air permeability:
UNE-EN ISO 9237:1996 — 1167,83 mm/s ±10%

Thermal Resistance (RCT):
ISO 11092: 2014 — 0,0168 m²K/W ±10%

Water Vapour Resistance (RET):
ISO 11092: 2014 — 2,6 m²Pa/W ±10%

Determination of breaking Strength and elongation:
UNE-EN ISO 13934-1:2013

Average Load (N)		Average Elongation (%)	
Lengthwise	420 ±10%	Lengthwise	89 ±10%
Crosswise	170 ±10%	Crosswise	232 ±10%

Determination of dimensional change in domestic washing and drying:
UNE-EN ISO 5077:2008 + ERRATUM:2008
Washing procedure 3M (Ta=40 ±3°C) according to ISO 6330:2012
Lengthwise ≤5 % Crosswise ≤5%

Resistance to pilling (martindale, 2000 cycles):
UNE-EN ISO12945-2:2001 — 3
Scale from 1 to 5 in which 1 is “Very severe pilling” and 5 is “No pilling”.

Determination of the abrasion resistance of fabrics:
UNE-EN ISO 12947-2:1999/AC:2006
Testing pressure: 9kPa — 32500 cycles
Until the first yarn broken

Fastness rates:

Colour fastness to domestic and commercial laundering
UNE-EN ISO 105-C06:2010 — 4-5

Colour fastness to perspiration (Alkaline & Acid):
UNE-EN ISO 105-E04:2013 — 4-5

Colour fastness to rubbing (Dry & Wet)
UNE-EN ISO 105-X12:2003 — 4-5

Colour fastness to sea water
UNE-EN ISO 105-E02:1996 — 4-5

(Fastness rates in a scale from 1 to 5 in which 1 is “Poor behaviour” and 5 is “Good behaviour”.)

Colour fastness to artificial light
UNE-EN ISO 105-B02:2013 method 2 — 4-5

(Fastness to artifical light rates in a scale from 1 to 8 in which 1 is “Very poor” and 8 is “Excelent”.)