


DESSEL – padded bib			
Description	<ul style="list-style-type: none"> adjustable elaticated braces, badge holder ring under the flap, central opening closed with zip and snap, internal and external double flap, double front pocket at the waistline with velcro closed flap, pockets for safe knees padded with <i>Thinsulate</i>[™]: this area has been reinforced because when on knees the wearer can exert pressure on this area, thus causing thermal dispersion, side opening along the whole leg closed by zip and snap, with double external and internal flap 		
	<p>Maintenance</p> <p>Maximum wash temperature: 30°C; Do not bleach; Do not dry clean; Do not dry in a tumble dryer; Do not iron.</p> <div>      </div> <div>  </div>		<p>Item</p> <p>V161-0-02 Navy</p>
		<p>Standards</p> <div>  <p>EN 342:2017</p> </div> <div> <p>EN ISO 13688:2013</p> <p>ICter 0.500(B)</p> <p>3 X</p> </div> <div>  </div>	<p>Sizes</p> <p>S-4XL</p>

SAFETY TECHNICAL SPECIFICATIONS

	Test method	Description	Cofra result	Minimum requirement / range
Background fabric	EN ISO 1833-1977, SECTIONE 10	Composition	100% Nylon Oxford 420 D	
	EN ISO 12127:1996	Weight per unit area	145 g/m ²	
	EN ISO 13688 :2013 4.2 (EN 14362-1)	Search of the aromatic and carcinogenic amines	Not recording	≤30 ppm
	EN ISO 13688:2013 4.2 (EN ISO 3071)	The pH's determination from the watery extract	pH = 5.9	3,5 ≤pH≤ 9,5
	EN ISO 13688:2013 5.3 (ISO 5077)	Dimensional change to washing after 5 washes (30°C)	warp: -1.4% weft: -1.4%	±3%

	EN 342:2017 4.6.1 (EN ISO 4674-1)	Tear strength	warp: 129 N weft: 114 N	>20 N
	ISO 105 E04	Colour fastness to perspiration	Acidic Alkaline	1-5
		<i>Colour change</i>	4-5 4-5	
		<i>Staining:</i>		
		diacetate	4-5 4-5	
		cotton	4-5 4-5	
		nylon	4-5 4-5	
		polyester	4-5 4-5	
		acrylic	4-5 4-5	
		wool	4-5 4-5	
	ISO 105-C06	Colour fastness to laundering at 40°C		
		<i>Colour change</i>	4-5	1-5
		<i>Staining:</i>		
		diacetate	4-5	
		cotton	4-5	
		nylon	4-5	
		polyester	4-5	
		acrylic	4-5	
		wool	4-5	
	ISO 105-X12	Colour fastness to rubbing	Dry: 4-5 Wet: 4-5	1-5
	ISO 105-B02	Colour fastness to light		
		<i>Colour change:</i>	5	1-5
	EN ISO 13934-1	Tensile strength	warp: 1600 N weft: 900 N	
Lining	EN ISO 1833-1977, SEZIONE 10	Composition	100% Polyester	
	EN ISO 12127:1996	Weight per unit area	55 g/m ²	
Padding	EN ISO 1833-1977, SEZIONE 10	Composition	100% Polyester (Thinsulate®)	
	EN ISO 12127:1996	Weight per unit area	1 layer G150 1 layer G200 350 g/m ²	

Reflex retro reflective fabric D6110	EN ISO 20471:2013/A1:2016 6.1	Retro reflective performance requirements of new material	PASS																																																																																																																																																																								
	EN ISO 20471:2013/A1:2016 6.2	Requirements of retro reflective performance after tests for abrasion, flexion, folding at cold temperature, temperature variations, washing (50 cycles ISO 6330 at 60°C) and rain influence.	PASS	$R' \geq 100 \text{ cd/(lx m}^2\text{)}$																																																																																																																																																																							
Vahrn+Dessel	EN 342:2017 6.3 (EN ISO 15831)	Measurement of thermal insulation by means of a thermal manikin	after 5 washes a 30°C $I_{cler} 0.500 \text{ [m}^2\text{K/W]}$																																																																																																																																																																								
<table><tr><th colspan="13">Table B: resultant effective thermal insulation of clothing I_{cler} and ambient temperature conditions for heat balance at different activity levels and duration of exposure</th></tr><tr><th rowspan="3">thermic insulation I_{cler} [m² K/W]</th><th colspan="12">moving activity</th></tr><tr><th colspan="2">75 W/m²</th><th colspan="2">75 W/m²</th><th colspan="2">115 W/m²</th><th colspan="2">115 W/m²</th><th colspan="2">170 W/m²</th><th colspan="2">170 W/m²</th></tr><tr><th colspan="2">air speed 0,4 m/s</th><th colspan="2">air speed 3 m/s</th><th colspan="2">air speed 0,4 m/s</th><th colspan="2">air speed 3 m/s</th><th colspan="2">air speed 0,4 m/s</th><th colspan="2">air speed 3 m/s</th></tr><tr><th></th><th>8h</th><th>1h</th><th>8h</th><th>1h</th><th>8h</th><th>1h</th><th>8h</th><th>1h</th><th>8h</th><th>1h</th><th>8h</th><th>1h</th></tr><tr><td>0,265</td><td>13</td><td>0</td><td>19</td><td>7</td><td>3</td><td>-12</td><td>9</td><td>-3</td><td>-12</td><td>-28</td><td>-2</td><td>-16</td></tr><tr><td>0,310</td><td>10</td><td>-4</td><td>17</td><td>3</td><td>-2</td><td>-18</td><td>6</td><td>-8</td><td>-18</td><td>-36</td><td>-7</td><td>-22</td></tr><tr><td>0,390</td><td>5</td><td>-12</td><td>13</td><td>-3</td><td>-9</td><td>-28</td><td>0</td><td>-16</td><td>-29</td><td>-49</td><td>-16</td><td>-33</td></tr><tr><td>0,412</td><td>3,6</td><td>-14,2</td><td>11,4</td><td>-4,7</td><td>-11,2</td><td>-30,8</td><td>-1,7</td><td>-18,2</td><td>-32,0</td><td>-52,0</td><td>-18,2</td><td>-35,8</td></tr><tr><td>0,470</td><td>0</td><td>-20</td><td>7</td><td>-9</td><td>-17</td><td>-38</td><td>-6</td><td>-24</td><td>-40</td><td>-60</td><td>-24</td><td>-43</td></tr><tr><td>0,500</td><td>-2,1</td><td>-22,6</td><td>5,7</td><td>-11,1</td><td>-20</td><td>-41</td><td>-8,1</td><td>-26,6</td><td>-43,8</td><td>-64,7</td><td>-27,4</td><td>-46,8</td></tr><tr><td>0,540</td><td>-5</td><td>-26</td><td>4</td><td>-14</td><td>-24</td><td>-45</td><td>-11</td><td>-30</td><td>-49</td><td>-71</td><td>-32</td><td>-52</td></tr><tr><td>0,620</td><td>-10</td><td>-32</td><td>0</td><td>-20</td><td>-31</td><td>-55</td><td>-17</td><td>-38</td><td>-60</td><td>-84</td><td>-40</td><td>-61</td></tr></table>					Table B: resultant effective thermal insulation of clothing I_{cler} and ambient temperature conditions for heat balance at different activity levels and duration of exposure													thermic insulation I_{cler} [m ² K/W]	moving activity												75 W/m ²		75 W/m ²		115 W/m ²		115 W/m ²		170 W/m ²		170 W/m ²		air speed 0,4 m/s		air speed 3 m/s		air speed 0,4 m/s		air speed 3 m/s		air speed 0,4 m/s		air speed 3 m/s			8h	1h	8h	1h	8h	1h	8h	1h	8h	1h	8h	1h	0,265	13	0	19	7	3	-12	9	-3	-12	-28	-2	-16	0,310	10	-4	17	3	-2	-18	6	-8	-18	-36	-7	-22	0,390	5	-12	13	-3	-9	-28	0	-16	-29	-49	-16	-33	0,412	3,6	-14,2	11,4	-4,7	-11,2	-30,8	-1,7	-18,2	-32,0	-52,0	-18,2	-35,8	0,470	0	-20	7	-9	-17	-38	-6	-24	-40	-60	-24	-43	0,500	-2,1	-22,6	5,7	-11,1	-20	-41	-8,1	-26,6	-43,8	-64,7	-27,4	-46,8	0,540	-5	-26	4	-14	-24	-45	-11	-30	-49	-71	-32	-52	0,620	-10	-32	0	-20	-31	-55	-17	-38	-60	-84	-40	-61
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	EN 342:2017 6.4 (EN ISO 9237)	Determination of the permeability of fabrics to air	after 5 washes a 30°C AP <1mm/s CLASS 3	AP (mm/s) AP>100 5<AP<100 AP<5 CLASS 1 2 3																																																																																																																																																																							