

TILCAR	A – polo shirt		
Description	 cotton inside, longer back side, segmented reflex stripes, side splits, sweat band, two- tone, rib collar and sleeve band, contrasting colour inserts made of three- dimensional punched fabric in the side /armpit/ shoulder / area to guarantee higher breathability, UV – rays protection, OEKO-TEX[®] Standard 100 		
Maintenance	Maximum wash temperature: 30°C; Do not bleach; Do not dry in a tumble dryer; Drying in the shade; ironing at low temperature (max 110°C); Do not dry clean. 30 20 20 20 20 20 20 20 20 20 20 20 20 20		EN 13758-2:2003 STANDARD
		Sizes	S – 4XL

SAFETY TECHNICAL SPECIFICATIONS

	Test method	Description	Cofra result	Minimum requirement / range
Background fabric fluorescent	EN ISO 1833-1977, SECTION 10	Composition:	55% cotton 45% recycled polyester	
	EN ISO 12127:1997	Fabric mass per unit area	175 g/m ²	
	EN ISO 13688 :2013/A1:2021 4.2 (EN 14362-1:2017)	Search of the aromatic and carcinogenic amines	Not recording Oeko-Tex [®]	≤30 ppm
	EN ISO 13688 :2013/A1:2021 4.2 (EN ISO 3071:2006)	the pH's determination from the watery extract	Oeko-Tex [®]	3,5 ≤pH≤ 9,5
	EN ISO 20471:2013/A1:2016 5.3.1 (ISO 105-X12)	Colour fastness to rubbing Staining	DRY 4-5	DRY 4

Made by Workwear Technical Dept.

Drafts, rules, tables, data, directives and others informations here contained or attached to this document, are owned only by Cofra s.r.l. and Draits, totles, tables, data, offectives and others monitoriations here contained to diatached to this document, are owned only by Conta s.r.l. and must not be given or disclosed to any third party. It shall be prohibited to give, to share and to copy data contained in this notice and its relative attached documents by any subject different from the recipient according to both Article 616 of Penal Code and Personal Data Protection Code (Italian Legislative Degree n.196/2003). According to Article 98 and Article 99 of C.P.I, Cofra s.r.l will act through civil, administrative, or penal sanctions in respect of perpetrators in deference to articles 1 2 4 and successive ones of C.P.I. In case of dispute Italian exclusive jurisdiction will be apply as well as the competent court will be that one where Cofra s.r.l. has its registered office

COFRA

BORN TO WORK

EN ISO 20471:2013/A1:2016	 Chromaticity and luminance of new material 	x= 0.374 y	= 0.548	co-ord x co-ord y
5.1	new material	$\beta_{min} = 0.94$		0.387 0.610
5.2	- Chromaticity and luminance after	x= 0.372	y= 0.543	0.356 0.494
	Xenon test	$\beta_{min} = 0.94$		0.398 0.452
7.5.1	-Chromaticity and luminance after	x= 0.375	y= 0.550	0.460 0.540
	50 washes cycles	$\beta_{min} = 0.94$		Minimum Luminance Facto
				$\beta_{min} > 0.7$
0.5000	0.5500		9.5900	\wedge
0.5400	0.5400	-	0.5400	
		/		
0.4900	0.4000		0.4900	
0.4400 0.3900 0	4400 0.4400 0.3908		0.4400	\sim
0.3400 0.3600 0 		0.4400	0.5400	0.3000 0.4400
EN ISO 20471:2013/A1:2016	Colour fastness to perspiration	Acidic	Alkaline	
5.3.2	Colour change	4-5	4-5	Colour change: 4
(ISO 105-E04)	Staining:			Staining: 4
	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	
EN ISO 20471:2013/A1:2016	Colour fastness to Laundering at 60°C			
5.3.3	Colour change	4-5		Colour change: 4-5
(ISO 105-C06)	Staining:			Staining: 4
	diacetate	4-5		
	cotton	4-5		
	nylon	4		
	polyester	4-5		
	acrylic	4-5		
	wool	4-5		
EN ISO 20471:2013/A1:2016 5.3.3	Colour fastness to hot pressing (110° C)			Colour change : 4-5
(ISO 105 -X11)	Colour change - dry	4-5		Staining: 4
EN ISO 20471:2013/A1:2016	Dimensional change to washing	warp: -1	.7%	±3%
5.4.1		weft: -0).2%	
(ISO 5077)				
EN ISO 20471:2013/A1:2016 5.5.2 (ISO 13938-1)	Hydraulic method for determination of bursting strength and bursting distensior	1120 KPa	a	>200KPa
EN ISO 20471:2013/A1:2016	Water penetration resistance	$R_{et} = 2.10$) [m ² Pa/W]	$R_{et} \leq 5 [m^2 Pa/W]$
5.6.3 (ISO 11092)	R _{et} [m ² Pa/W]			
EN 13758-2:2003+A1:2006	UPF	>50		>50
4.2	UPF Average	135,20		
				= = /
(EN 13758-1)	UVA _{Average} (%)	1,20		<5%

Made by Workwear Technical Dept.

Drafts, rules, tables, data, directives and others informations here contained or attached to this document, are owned only by Cofra s.r.l. and must not be given or disclosed to any third party. It shall be prohibited to give, to share and to copy data contained in this notice and its relative attached documents by any subject different from the recipient according to both Article 916 of Penal Code and Personal Data Protection Code (Italian Legislative Degree n.196/2003). According to Article 98 and Article 99 of C.P.I, Cofra s.r.l will act through civil, administrative, or penal sanctions in respect of perpetrators in deference to articles 1 2 4 and successive ones of C.P.I. In case of dispute Italian exclusive jurisdiction will be apply as well as the competent court will be that one where Cofra s.r.l. has its registered office



Bonn					
Non fluorescent fabric	EN ISO 1833-1977, SECTION 10	Composition:	100% recy polyester	cled	
	EN ISO 12127:1996	Fabric mass per unit area	160 g/m ²		
	EN ISO 13688 :2013/A1:2021 4.2 (EN ISO 3071:2006)	the pH's determination from the watery extract	Oeko-Tex [®])	3,5 ≤pH≤ 9,5
	EN ISO 13688 :2013/A1:2021 4.2 (EN 14362-1:2017)	Search of the aromatic and carcinogenic amines	Not recordi Oeko-Tex [®]	-	≤30 ppm
	EN ISO 20471:2013/A1:2016 5.3.1 (ISO 105-X12)	Colour fastness to rubbing Staining:	Dry: 4-5		Dry: Staining: 4
	EN ISO 20471:2013/A1:2016	Colour fastness to perspiration	Acidic	Alkaline	
	5.3.2	Colour change	4-5	4-5	Colour change : 4
	(ISO 105-E04)	Staining:	40	40	Staining: 4
		diacetate	4-5	4-5	otanning. 4
		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	
	EN ISO 20471:2013/A1:2016 5.3.3 (ISO 105-C06)	Colour fastness to Laundering at 60°C Colour change Staining:	4-5		Colour change : 4-5 Staining: 4
		diacetate	4-5 4-5		
		cotton nylon	4-5 4		
		polyester	4 4-5		
		acrylic	4-5 4-5		
		wool	4-5		
	EN ISO 20471:2013/A1:2016 5.3.3	Colour fastness to hot pressing (110° C)			Colour change : 4-5
	(ISO 105 -X11)	Colour change - dry	4-5		Staining: 4
	EN ISO 20471:2013/A1:2016 5.4.1 (ISO 5077)	Dimensional change to washing	warp: -0.49 weft: 1.19		±3%
	EN ISO 20471:2013/A1:2016 5.5.2 (ISO 13938-1)	Hydraulic method for determination of bursting strength and bursting distension	1100 KPa		>200KPa
	EN ISO 20471:2013/A1:2016 5.6.3 (ISO 11092)	Water penetration resistance R_{et} [m ² Pa/W]	R _{et} = 2.13 [[m² Pa/W]	$R_{et} \leq 5 \left[m^2 Pa/W \right]$
	EN 13758-2:2003+A1:2006	UPF	>50		>50
	4.2 (EN 12758 1)		95,67 1 <i>4</i> 7		~E0/
	(EN 13758-1)	UVA _{Average} (%) UVB _{Average} (%)	1,47 0,92		<5%
		-			

Made by Workwear Technical Dept.

Version 1.0 date 02/10/2023 Drafts, rules, tables, data, directives and others informations here contained or attached to this document, are owned only by Cofra s.r.l. and must not be given or disclosed to any third party. It shall be prohibited to give, to share and to copy data contained in this notice and its relative attached documents by any subject different from the recipient according to both Article 916 of Penal Code and Personal Data Protection Code (Italian Legislative Degree n.196/2003). According to Article 98 and Article 99 of C.P.I, Cofra s.r.I will act through civil, administrative, or penal sanctions in respect of perpetrators in deference to articles 1 2 4 and successive ones of C.P.I. In case of dispute Italian exclusive jurisdiction will be apply as well as the competent court will be that one where Cofra s.r.l. has its registered office

) F	RA®
BORN	ΤO	WORK

BORN	TO WORK IEC	INICAL SHEET		
Ribbed fabric (collar and sleeve band)	EN ISO 1833-1977, SECTION 10	Composition:	95% poliéster 5% elastán	
	EN ISO 13688 :2013/A1:2021 4.2 (EN 14362-1:2017)	Search of the aromatic and carcinogenic amines	Not recording Oeko-Tex [®]	≤30 ppm
	EN ISO 13688 :2013/A1:2021 4.2 (EN ISO 3071:2006)	the pH's determination from the watery extract	Oeko-Tex [®]	3,5 ≤pH≤ 9,5
Reflex D4300	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 (30 cycles ISO 6330 at 60°C) and rain influence.	PASS	R´≥100 cd/(lx m²)
TILCARA	EN ISO 20471:2013/A1:2016 4.1 * At least (50±10)% of the minimum area of visible background material shall be on the front part of garments	Minimum required areas of visible material in m ² Size S (reflex 60 mm)	Class 2 Background material front part (fluorescent) 0.25m ² Background material back part (fluorescent) 0.27 m ² Background material total (fluorescent) 0.52 m ² Retro reflective material 0.14 m ² * Maximum areas for logos, lettering, labels, etc. 0.02 m ²	Background material $CLASS \ 3 = 0.80m^2$ $CLASS \ 2 = 0.50m^2$ $CLASS \ 1 = 0.14m^2$ Retro reflective material $CLASS \ 3 = 0.20 \ m^2$ $CLASS \ 2 = 0.13 \ m^2$ $CLASS \ 1 = 0.10 \ m^2$
		Minimum required areas of visible material in m ² Size S (reflex 50 mm)	Class 2 Background material front part (fluorescent) 0.28 m ² Background material back part (fluorescent) 0.30 m ² Background material total (fluorescent) 0.58 m ² Retro reflective material 0.13 m ² * Maximum areas for logos, lettering, labels, etc. 0.08 m ²	
	EN 13758-2:2003 + A1:2006	Minimum value UPF 40+ - Sun exposure causes skin damage - Only covered areas are protected - The protection offered by this item may be reduced with use or if stretched or wet - Provides UVA + UVB protection fron the sun		This European Standard specifies the requirements for marking of clothing which are designed to offer the wearer protection against solar ultraviolet radiation exposure

Version 1.0 date 02/10/2023 Drafts, rules, tables, data, directives and others informations here contained or attached to this document, are owned only by Cofra s.r.l. and must not be given or disclosed to any third party. It shall be prohibited to give, to share and to copy data contained in this notice and its relative attached documents by any subject different from the recipient according to both Article 616 of Penal Code and Personal Data Protection Code (Italian Legislative Degree n.196/2003). According to Article 91 of C.P.I., Cofra s.r.l. will act through civil, administrative, or penal sanctions in respect of perpetrators in deference to articles 1 2 4 and successive ones of C.P.I. In case of dispute Italian exclusive jurisdiction will be apply as well as the competent court will be that one where Cofra s.r.l. has its registered office