

G014 - HYDRONIT
Cold Protection Nitrile



EN 388:2016
+A1:2018



2142X

EN 511:2006



221

DEXTERITY



Features

- New generation of soft shell gloves made of innovative COFRA-TEX membrane
- Unique glove of this kind thanks to thermo-regulating COFRA-TEX membrane
- New technology drawn from sports to PPE world
- Fabric made of 3 layers that ensure elasticity, water repellency and heat protection:
 - the softshell fabric grants flexibility
 - COFRA-TEX inner membrane makes the glove water repellent, windproof and breathable at the same time
 - the soft internal pile increases heat sensation
- Nitrile foam coating to grant oil protection and at the same time excellent flexibility and breathability
- Long neoprene cuff with velcro closure covering the entire sleeve to avoid the entrance of cold air and water
- Suitable for outdoor environments in windy and rainy areas
- Excellent for work environments with temperature up to -30°C
- COFRA-TEX membrane keeps internal microclimate which remains unchanged if there is wind (WIND CHILL) and humidity
- Membrane certified values, palm breathability: 3.0 mg/cm²h



SOFTSHELL WITH WINDPROOF COFRA-TEX MEMBRANE - BREATHABLE NITRILE FOAM



LONG NEOPRENE CUFF



RECOMMENDED WITH TEMPERATURE UP TO -30 °C

Coating

Nitrile foam

Fabric

Softshell with COFRA-TEX membrane

Cuff

Neoprene

Colour

Turquoise/black

Application

Airport workers, naval workers, building and construction, stock handling winter use, street cleaners

Sizes

8 (M)	9 (L)	10 (XL)	11 (XXL)
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Lenght

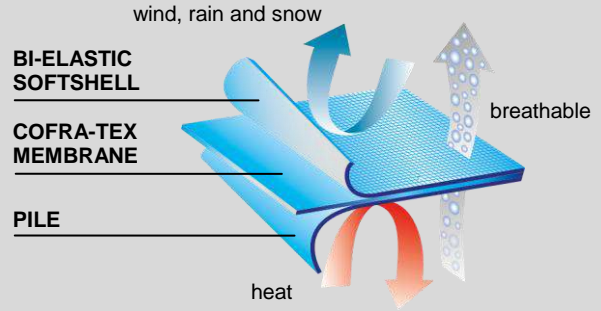
28,5 cm	29 cm	29,5 cm	30 cm
11,2"	11,4"	11,6"	11,8"

Packaging

Code	Quantity
G014-D100	1 dozen (12 single packed gloves)
G014-K100	Carton containing 6 dozen (72 single packed gloves)

COFRA **tex**
WINDPROOF

COFRA-TEX is a TPU membrane (Thermoplastic Polyurethane): elastic in 4 directions, super light, ultra thin, resistant to oil and grease, with great properties of breathability and water repellency. The gloves made of **COFRA-TEX** membrane have excellent mechanical properties. Laboratory tests proved good tear and traction resistance.



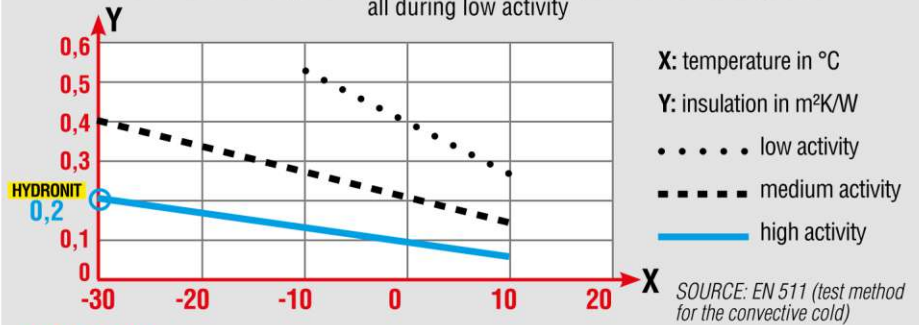
WIND CHILL is a parameter that allows measurement of the discomfort due to cold when this is worsened by wind effect. The wind significantly increases heat loss from our body, that exposed to harsh temperatures risks frostbite.

Here below a table showing the incidence in different extreme conditions and the temperature felt by the human body (WIND CHILL):

	10 Km/h	20 Km/h	30 Km/h	40 Km/h	50 Km/h
5 °C	3	1	0	-1	-1
0 °C	-3	-5	-6	-7	-8
-5 °C	-9	-12	-13	-14	-15
-10 °C	-15	-18	-19	-21	-22
-15 °C	-21	-24	-26	-27	-29
-20 °C	-27	-30	-33	-34	-35
-25 °C	-33	-37	-39	-41	-42

GLOVE INSULATION REQUIREMENT IN 3 CONDITIONS OF PHYSICAL ACTIVITY
(in conditions of nearly total lack of wind ~2 km/h)

Glove insulation requirements increase as the temperature decreases, above all during low activity



HYDRONIT:

- Index of thermal insulation from convective cold - I_{TR} : 0,20 m²K/W
- Index of resistance to contact cold - R: 0,076 m²K/W

HYDRONIT glove provides protection for high-activity works up to -30 °C, unlike the other gloves which, even with the same index but in presence of wind and more humidity, reduce considerably protection performances.

EVALUATION OF GLOVE AT SEVERE WORKING CONDITIONS AT -15 °C AND INDEX OF THERMAL INSULATION CAUSED BY CONVECTIVE COLD I_{TR} : 0,20 m²K/W

EXTERNAL TEMPERATURE	WIND	WIND-CHILL (perceivable temperature)	EVALUATION	
			HYDRONIT	Winter knitted gloves
-15 °C	2 Km/h	-15 °C	EXCELLENT	EXCELLENT
-15 °C	10 Km/h	-21 °C	EXCELLENT	MEDIUM
-15 °C	20 Km/h	-24 °C	EXCELLENT	BAD
-15 °C	30 Km/h	-26 °C	GOOD	BAD

In order to evaluate the glove it is necessary to take into consideration that also the relative air humidity.

SAFETY TECHNICAL SPECIFICATIONS

The PPE is in compliance with essential requirements of (EU) 2016/425 regulation

STANDARD	DESCRIPTION	MINIMUM REQUIREMENT / RANGE	RESULT REACHED
EN 420:2003 + A1 2009	pH determination	3,5 < pH < 9,5	7,05
EN 420:2003 + A1 2009	Chromium VI determination	≤ 10 mg/kg	NOT RECORDING
UNI EN 14362-1/3:2012	Carcinogenic and aromatic amines	≤ 30 ppm	NOT RECORDING
EN ISO 21420:2020	Further technical specifications applied	COMPLIANT / NOT COMPLIANT	COMPLIANT

STANDARD	DESCRIPTION	LEVEL					LEVEL REACHED
		1	2	3	4	5	
EN 388:2016+A1:2018	Abrasion resistance (number of frictions)	≥ 100	≥ 500	≥ 2000	≥ 8000	-	2
EN 388:2016+A1:2018	Cutting test : blade cut resistance (index)	≥ 1,2	≥ 2,5	≥ 5,0	≥ 10,0	≥ 20,0	1
EN 388:2016+A1:2018	Tear resistance (N)	≥ 10	≥ 25	≥ 50	≥ 75	-	4
EN 388:2016+A1:2018	Puncture resistance (N)	≥ 20	≥ 60	≥ 100	≥ 150	-	2
EN 388:2016+A1:2018 - EN ISO 13997	TDM : cutting resistance (N)	A	B	C	D	E	X
		≥ 2	≥ 5	≥ 10	≥ 15	≥ 22	
EN 388:2016+A1:2018 - EN 13594:2015	Impact protection	P			ABSENT		ABSENT
		Achieved			Test not executed		

If one of the marking indexes is marked with:

- letter "X" means that the test wasn't executed or not applicable;
- number "0" means that the test was executed but the minimum performance level hasn't been achieved

STANDARD	DESCRIPTION	LEVEL				LEVEL REACHED
		1	2	3	4	
EN 511:2006	Convective cold Thermal insulation value I_{TR} (m ² K/W)	0,10 ≤ I_{TR} < 0,15	0,15 ≤ I_{TR} < 0,22	0,22 ≤ I_{TR} < 0,30	0,30 ≤ I_{TR}	2
EN 511:2006 - ISO 5085-1	Cold contact Thermal resistance R (m ² K/W)	0,025 ≤ R < 0,050	0,050 ≤ R < 0,100	0,100 ≤ R < 0,150	0,150 ≤ R	2
EN 511:2006 - ISO 15383	Water resistance *	1 Achieved		0 Not achieved		1

* The performance level 1 indicates that no water transit occurred at the end of the trial period. When this requirement is not fulfilled, it is indicated with performance level 0 and the gloves if they are wet can lose their insulating capacities.

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