





THE NEW GENERATION OF POLYURETHANE SURFACES

Grabo's new surface treatment combines state-of-the-art technology with a customized, special lacquer formula. With several months of development work, our engineering team has developed lacquer formulas that best meets the specific requirements of each application. This results in excellent chemical resistance, very easy cleaning and outstanding scuff resistance of our sports floor products.

WHAT ARE THE MOST IMPORTANT FEATURES OF THE X-PUR SURFACE FOR USERS?

() 1. OUTSTANDING SCUFF RESISTANCE

Grabo's engineered X - PUR finish maked it excellent scuff resistent.

) 2. AESTHETIC MATT SHINE

In the first cross-linking step, under N2 atmosphere, with a narrow spectrum UV laser, a micro-structured surface is formed that disperses the incident light beams, resulting in an aesthetic matt surface. Thus, it is not necessary to use a matting agent in the technology, which tends to settle, thereby reducing manufacturing safety and uniform product quality.

() 3. EASY CLEANING

Without surface treatment

In addition to the special recipe, the easy cleaning of the surface is due to the completely imporous, closed surface.

BEFORE CLEANING

AFTER CLEANING

surface treatment

4. DURABILITY

It has two pillars. On one hand, the perfectly cross-link structured closed layer, created with the double curing is harder and more resistant than conventional PUR layers. On the other hand, the abrasion resistant lacquer is applied to the surface in two layers. For these reasons, the product does not need to be surface treated throughout its lifetime.

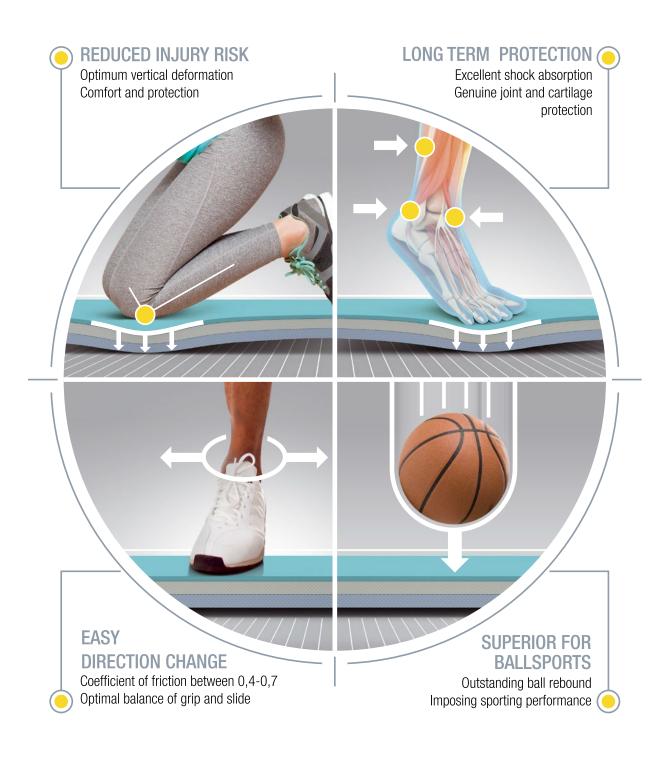




WHY GRABO SPORTS FLOORING?

WIDE RANGE OF PRODUCTS/APPLICATIONS

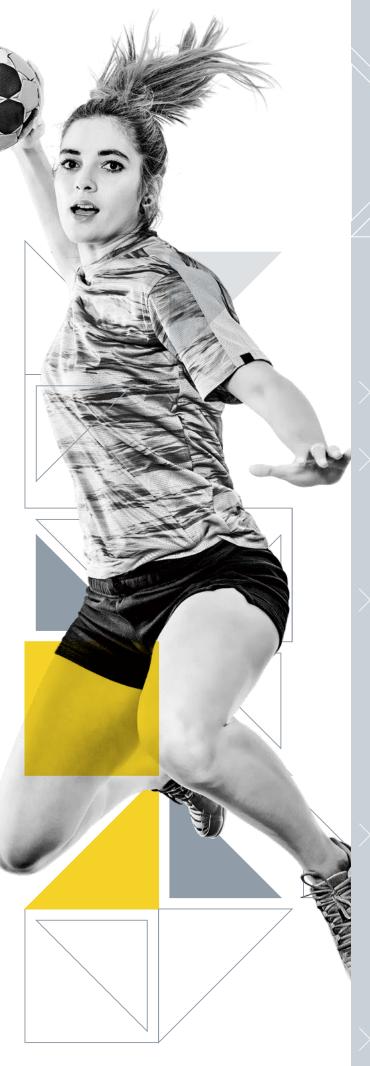
- Solutions for competition, training and leisure.
- More options for several applications, from kindergarten, through fitness halls, to high competition level sport facilities.
- 2-10 mm thick sport floorings, special coverings and accessories.



ECOLOGICAL FORMULA









High energy absorption due to the bottom foam layer.
Comfort and protection

Optimized deformation shape through the upper foam layer. Easy direction change



GraboSAN treatment stops the growth of germs. Reduced risk of contamination in case of injuries.



Due to its special top layer periodical renewal is not necessary. Therefore they can be used continuously, reduced life cycle costs, less chemicals and less energy comsumption. Environmentally sound product with reduced maintenance costs.

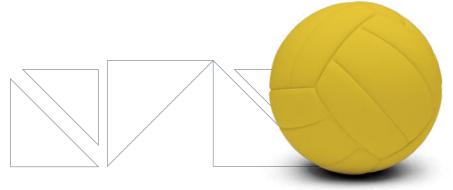


Our products are made by technological procedures without using solvents or heavy metals.

Less environmental impact.









MULTISPORT FLOORS

- High schock absorption due to its Combined Foam Backing > Long term joint and cartilage protection
- Stable construction and outstanding ball rebound > Ideal for game ball sports
- Excellent foam quality, optimal vertical deformation > Reduced risk of injury, higher underfoot comfort
- **Due to its graboSAN treatment** > Stops the growth of germs
- 2 m wide rolls > Less welding and joints





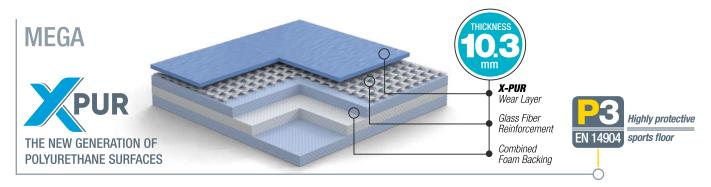


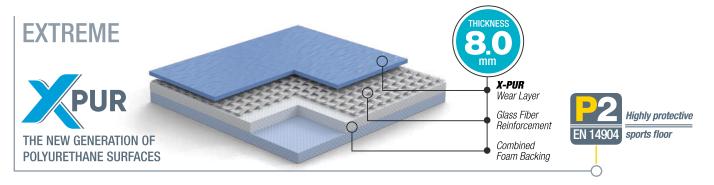


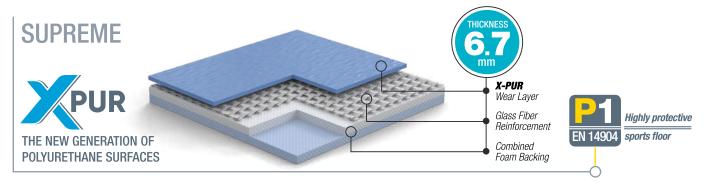


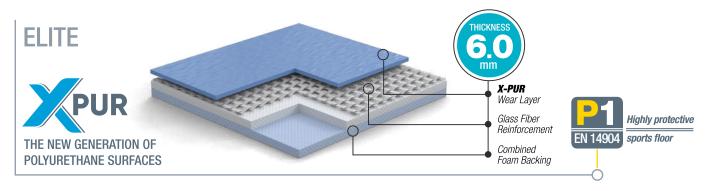










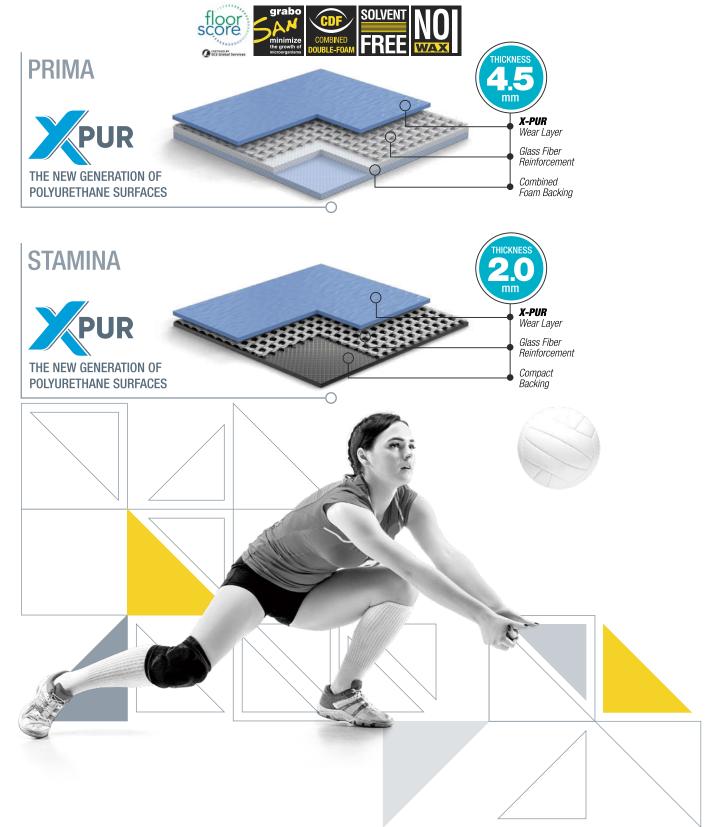






MULTISPORT FLOORS

- Coefficient of friction between 0,4-0,7 > Optimal balance of grip and slide
- Easy to clean without periodical polishing > Less energy consumption, less maintenance cost
- · Optimal specular gloss
- · Solvent and heavy metal free products
- 100 % recyclable
- Contains pre-consumer recycled materials
- Light weight and flexibility; Available in rolls > Easy and quick installation
- 2 m wide rolls > Less welding and joints

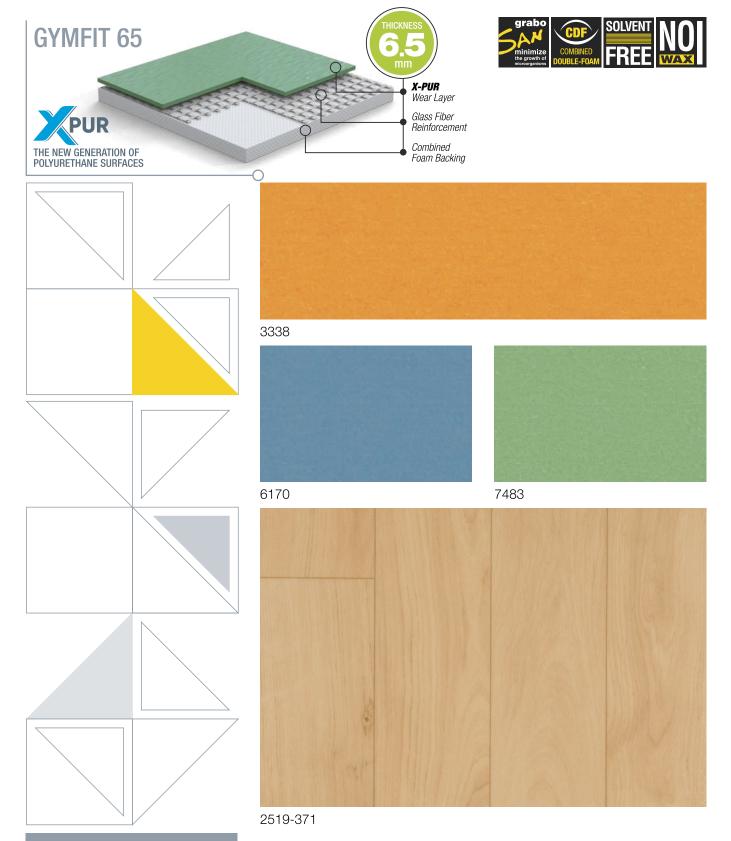






SPORT FLOORS

- Coefficient of friction between 0,4-0,7 > Optimal balance of grip and slide
- Easy to clean without periodical polishing > Less energy consumption, less maintenance cost
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- 2 m wide rolls > Less welding and joints







SPORT FLOORS

- Coefficient of friction between 0,4-0,7 > Easy direction change
- No periodical polishing required > Less energy consumption, less maintenance cost
- Optimal specular gloss
- Solvent, heavy metal and phtalathe free formulation; Low VOC > Environmentally sound solution
- 100 % recyclable
- Contains pre-consumer recycled materials
- Light weight and flexibility; Available in rolls > Easy and quick installation
- 2 m wide rolls > Less welding and joints



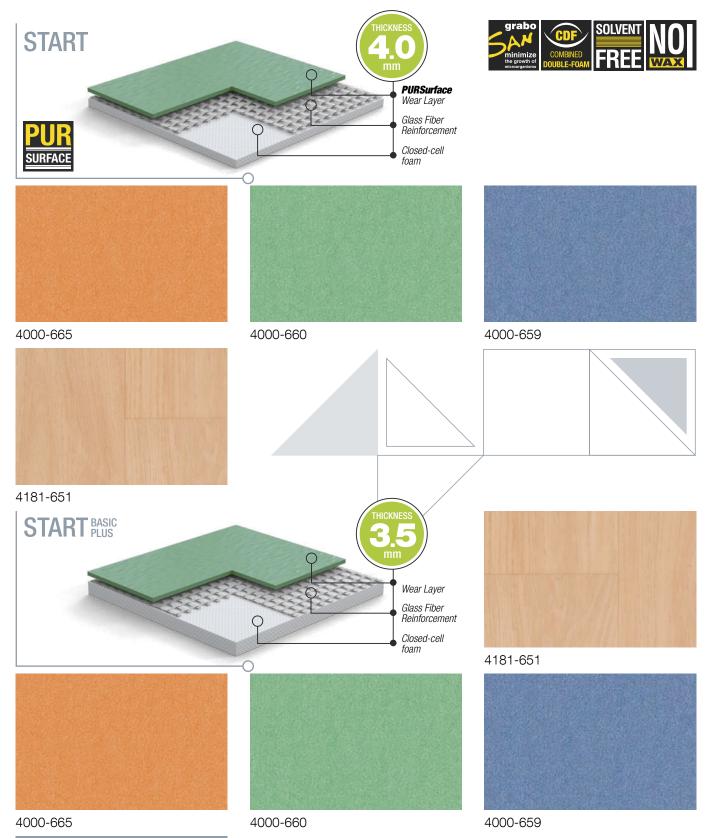
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SPORT FLOORS

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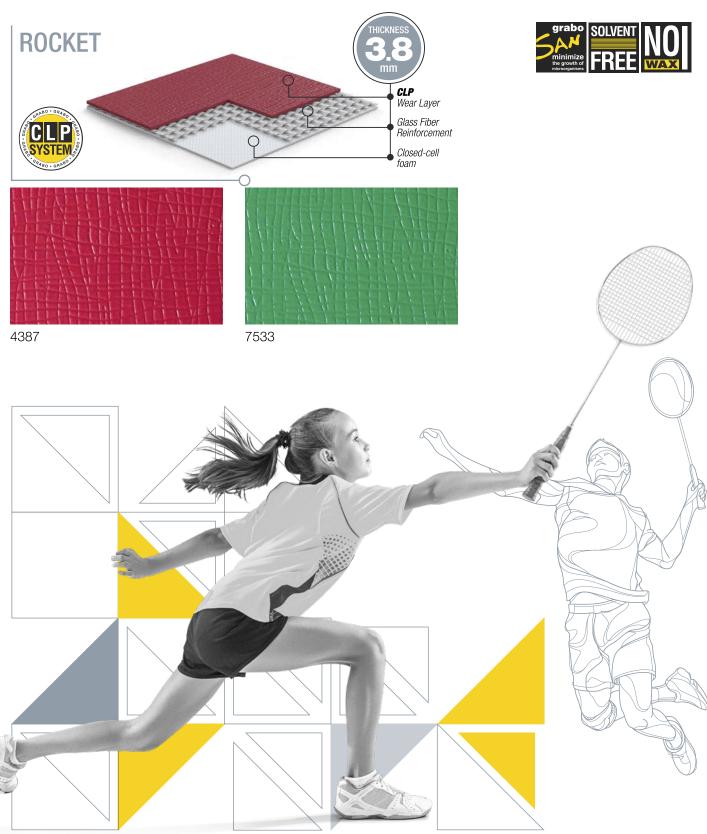






BADMINTON AND TABLE TENNIS FLOORS

- Light weight Easy to roll in and out > Suitable to use temporarly
- Optimal specular gloss
- Solvent, heavy metal and phtalathe free formulation; Low VOC > Environmentally sound solution
- Contains pre-consumer recycled materials
- 100 % recyclable



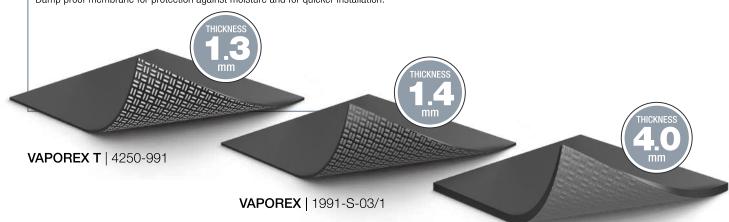




SPECIALITIES & ACCESSORIES

VAPOREX damp proof membrane

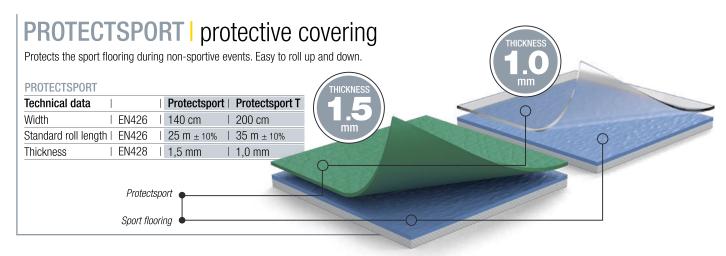
Damp proof membrane for protection against moisture and for quicker installation.



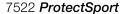
VAPOREX

Technical data		Vaporex T	Vaporex	Vaporex 40
Width	EN426	200 cm	145 cm	145 cm
Standard roll len	gth EN426	$35 \text{ m} \pm 10\%$	25 m ± 10%	$ $ 25 m \pm 10%
		1	$45 \text{ m} \pm 10\%$	I
Thickness	EN428	I 1,3 mm	1,4 mm	4,0 mm

VAPOREX 40 | 1991-S-01/1





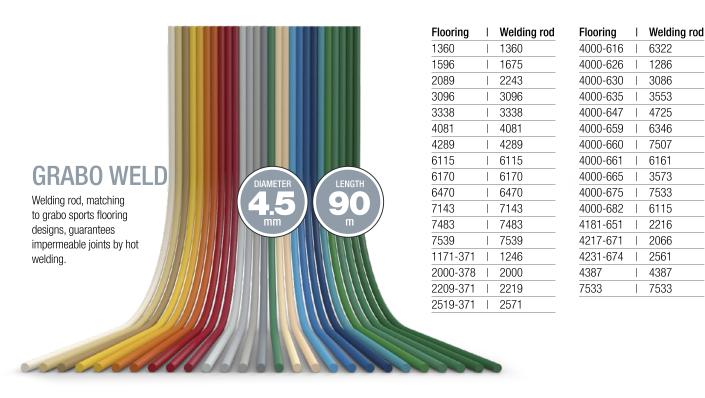




1784 ProtectSport



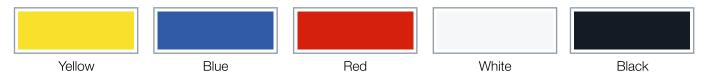
5000-510 ProtectSport T



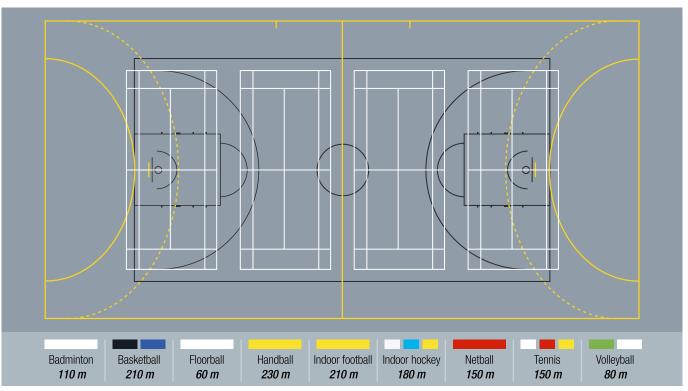
GRABO COLOR

Paints for marking sports ground lines.

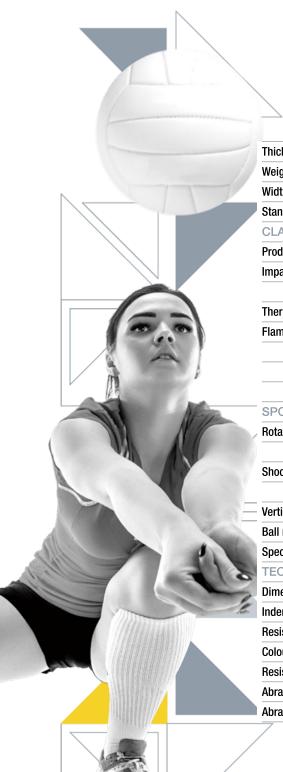
Required quantity: 11 for 100 m long, 5 cm wide line.



Recommended colors







| MULTISPORT | COMPETITION SPORT | LEASURE SPORT | SCHOOL | TRAINING

			MEGA	EXTREME	SUPREME
Thickness	mm	EN ISO 24346	10.3	8.0	6.7
Weight	kg/m²	EN ISO 23997	5.2	4.25	3.6
Width	m	EN ISO 24341	2	2	2
Standard roll length	m	EN ISO 24341	15	15	20
CLASSIFICATION					
Product specification			EN 14904	EN 14904	EN 14904
Impact sound insulation	∆LW (db)	EN ISO 717-2	23	21	21
	∆LW (db)	EN ISO 140-8	23	21	21
Thermal resistance	m²K/W	EN426	0.10	0.08	0.07
Flammability		NF P 92-512	M3	M3	M3
		EN 13501-1	C _{fl} -S1	C _{fl} -S1	C _{ff} -S1
		ÖNORM B3810/B3800/2	B1-Q1	B1-Q1	B1-Q1
		ISO 3795	100	100	100
SPORT PROPERTIES					
Rotational friction		EN13036-4	80-110	80-110	80-110
		Pr EN 14903	0.4-0.6	0.4-0.6	0.4-0.6
Shock absorption	%	DIN 18032	>38	>28	>28
	%	EN 14808	≥45 (P3)	≥35 (P2)	≥25 (P1)
Vertical deformation	mm	EN 14809	2.0	1.9	1.3
Ball rebound	%	EN 12235	96	98	97
Specular gloss		EN 2813	≤ 30	≤ 30	≤ 30
TECHNICAL CHARACTER	RISTICS				
Dimensional stability	max.%	EN ISO 23999	+/-0.2	+/-0.2	+/-0.2
Indentation resistance	mm	EN 1516	<0.5	<0.5	<0.5
Resistance to rolling load	N	EN 1569	1500	1500	1500
Colour fastness		ISO 105 B02	6	6	6
Resistance to chemicals		EN ISO 26987	\checkmark	\checkmark	√
Abrasion resistance (H18 wheel)	≤1000 mg/ 1000 cycles	EN ISO 5470-1	<250	<250	<250
Abrasion group		EN 660-1	Т	T	Т
7					







LEASURE SPORT I COMPETITION SPORT

LEASURE SPORT

ELITE	PRIMA	STAMINA	GYMFIT 65	GYMFIT 50	START	START BASIC PLUS	ROCKET
6.0	4.5	2.0	6.5	5.0	4.0	3.5	3.8
3.25	2.8	2.8	3.6	3.5	2.7	2.3	2.42
2	2	2	2	2	2	2	2
20	20	20	15	20	20	20	16,20
EN 14904	EN 14904	EN 649	EN 651	EN 651	EN 651	EN 651	EN 651
21	21	-	16	-	-	-	-
21	21	-	16	-	-	-	-
0.06	0.04	0.01	0.05	0.045	0.03	0.03	0.03
M3	M3	-	M3	M3	-	-	-
C _{fl} -S1	-						
B1-Q1	B1-Q1	-	B1-Q1	B1-Q1	-	-	-
100	100	100	100	100	100	-	100
80-110	80-110	80-110	80-110	80-110	80-110	80-110	80-110
0.4-0.6	0.4-0.6	0.4-0.6	-	-	-	-	-
>28	-	-	17	17	12	12	-
≥25 (P1)	-	-	14	14	9	9	-
1.0	0.7	-	0.33	0.33	0.4	0.4	0.33
98	98	>90	100	99	90	90	>90
≤ 30	≤ 30	≤ 30	≤ 30	≤ 30	≤ 30	≤ 30	≤ 30
+/-0.2	+/-0.2	+/-0.2	+/-0.2	+/-0.2	+/-0.2	+/-0.2	+/-0.2
<0.5	< 0.5	<0.23	<0.5	< 0.5	-	-	<0.5
1500	1500	1500	1500	1500	1500	1500	1500
6	6	6	6	6	6	6	6
\checkmark	\checkmark						
<250	<250	<250	<250	<250	<250	<250	<250
T	T	T	Т	T	T	T	T













