

## Target Values / Sollwerte / Valores Asignados/ Valeurs Cibles

<https://www.human.de/target-value-sheets/>

Reagent name @ Method Reagenzbezeichnung @ Methode Nombre del reactivo @ Método Nom du réactif @ Méthode	applicable for anwendbar für aplicable para applicable pour	SI Unit SI Einheit Unidad SI Unité SI	Mean Mittelwert Media Moyenne	Range Bereich Rango Plage de valeurs	Unit Einheit Unidad Unité	Mean Mittelwert Media Moyenne	Range Bereich Rango Plage de valeurs
<b>HUMAN reagent kits</b>							
<b>ACID PHOSPHATASE</b> a-Naphthylphosphate, Hillmann mod., 37°C	HumaLyzor photometer, HumaStar analyzer	µkat/l	0.09	0.07 - 0.10	U/l	5.12	4.12 - 6.12
<b>ALBUMIN Iiquicolor</b> Bromcresol green	HumaLyzor photometer	g/l	27.3	25.2 - 29.4	g/dl	2.73	2.52 - 2.94
	HumaStar analyzer	g/l	28.5	23.9 - 33.1	g/dl	2.85	2.39 - 3.31
<b>ALKALINE PHOSPHATASE Iiquicolor</b> AMP buffer, 37°C, IFCC	HumaLyzor photometer	µkat/l	1.78	1.52 - 2.05	U/l	107	90.9 - 123
	HumaStar analyzer	µkat/l	1.83	1.56 - 2.12	U/l	110	93.8 - 127
<b>ALKALINE PHOSPHATASE opt. Iiquicolor</b> DEA buffer, 37°C, GSCC/DGKC	HumaLyzor photometer w/o HL4000	µkat/l	2.28	2.03 - 2.52	U/l	137	122 - 151
	HumaLyzor 4000	µkat/l	2.00	1.73 - 2.27	U/l	120	104 - 136
	HumaStar analyzer	µkat/l	2.28	1.90 - 2.68	U/l	137	114 - 161
<b>alpha-AMYLASE Iiquicolor</b> CNPG3, 37°C, IFCC	HumaLyzor photometer	µkat/l	1.78	1.53 - 2.02	U/l	107	92.0 - 121
	HumaStar analyzer	µkat/l	1.83	1.67 - 1.98	U/l	110	100 - 119
<b>auto-BILIRUBIN-D Iiquicolor</b> DPD	HumaLyzor photometer	µmol/l	14.4	9.58 - 19.0	mg/dl	0.84	0.56 - 1.11
	HumaStar analyzer	µmol/l	13.3	11.8 - 14.9	mg/dl	0.78	0.69 - 0.87
<b>auto-BILIRUBIN-T Iiquicolor</b> DPD	HumaLyzor photometer	µmol/l	21.5	15.6 - 27.4	mg/dl	1.26	0.91 - 1.60
	HumaStar analyzer w/o H5600	µmol/l	17.8	15.4 - 20.2	mg/dl	1.04	0.90 - 1.18
	HumaStar 600	µmol/l	15.2	12.5 - 17.8	mg/dl	0.89	0.73 - 1.04
<b>BILIRUBIN Iiquicolor</b> DCA	HumaLyzor photometer	µmol/l	14.5	12.1 - 16.9	mg/dl	0.85	0.71 - 0.99
<b>BILIRUBIN DIRECT/TOTAL Iiquicolor</b> Determination of Bilirubin direct Jendrassik-Gróf	HumaLyzor photometer w/o HL4000	µmol/l	10.6	9.06 - 12.1	mg/dl	0.62	0.53 - 0.71
	HumaLyzor 4000	µmol/l	12.8	7.18 - 18.3	mg/dl	0.75	0.42 - 1.07
<b>BILIRUBIN DIRECT/TOTAL Iiquicolor</b> Determination of Bilirubin total Jendrassik-Gróf	HumaLyzor photometer w/o HL4000	µmol/l	18.3	15.9 - 20.7	mg/dl	1.07	0.93 - 1.21
	HumaLyzor 4000	µmol/l	18.8	12.8 - 24.6	mg/dl	1.10	0.75 - 1.44
<b>CALCIUM Iiquicolor</b> Ortho-cresolphthalein	HumaLyzor photometer	mmol/l	2.24	2.07 - 2.40	mg/dl	8.94	8.29 - 9.59
	HumaStar analyzer	mmol/l	2.23	2.05 - 2.41	mg/dl	8.93	8.21 - 9.64
<b>Chloride</b> ISE direct	HumaStar 600, HumaLyte	mmol/l	98.4	96.6 - 100	mg/dl	349	342 - 355
<b>CHLORIDE Iiquicolor</b> TPTZ	HumaLyzor Primus	mmol/l	102	88.4 - 115	mg/dl	362	313 - 408
	HumaLyzor 4000	mmol/l	115	95.7 - 133	mg/dl	408	339 - 471
	HumaStar analyzer	mmol/l	99.0	87.8 - 111	mg/dl	351	311 - 393
<b>CHOLESTEROL Iiquicolor</b> CHOD PAP	HumaLyzor photometer	mmol/l	3.93	3.57 - 4.27	mg/dl	152	138 - 165
	HumaStar analyzer	mmol/l	4.01	3.52 - 4.47	mg/dl	155	136 - 173
<b>CK NAC activated</b> Enzymatic, 37°C	HumaLyzor photometer	µkat/l	2.35	1.43 - 3.28	U/l	141	85.5 - 197
<b>CK NAC IiquiUV</b> Enzymatic, 37°C, IFCC	HumaLyzor photometer	µkat/l	2.48	2.03 - 2.93	U/l	149	122 - 176
	HumaStar analyzer	µkat/l	2.50	2.08 - 2.90	U/l	150	125 - 174
<b>auto-CREATININE Iiquicolor</b> Jaffé	HumaLyzor photometer	µmol/l	69.0	61.0 - 76.9	mg/dl	0.78	0.69 - 0.87
	HumaStar analyzer	µmol/l	84.9	74.3 - 95.5	mg/dl	0.96	0.84 - 1.08
<b>CREATININE Iiquicolor</b> Jaffé	HumaLyzor photometer	µmol/l	79.6	69.8 - 89.3	mg/dl	0.90	0.79 - 1.01
<b>CREATININE (enzym) Iiquicolor</b> Enzymatic	HumaLyzor photometer	µmol/l	76.9	62.8 - 91.1	mg/dl	0.87	0.71 - 1.03
	HumaStar analyzer	µmol/l	70.7	54.8 - 86.6	mg/dl	0.80	0.62 - 0.98
<b>gamma-GT Iiquicolor</b> Gamma-Glutamyl-3carboxy-4-nitroanilide, 37°C, IFCC	HumaLyzor photometer	µkat/l	1.02	0.84 - 1.20	U/l	61.1	50.3 - 71.9
	HumaStar analyzer	µkat/l	1.11	0.95 - 1.28	U/l	66.8	56.7 - 76.9
<b>GLUCOSE Iiquicolor</b> GOD	HumaLyzor photometer	mmol/l	5.22	3.79 - 6.66	mg/dl	94.0	68.2 - 120
	HumaStar analyzer	mmol/l	5.66	5.22 - 6.05	mg/dl	102	94.0 - 109
<b>GLUCOSE IiquiUV<sup>mono</sup></b> Hexokinase	HumaLyzor photometer	mmol/l	5.88	4.38 - 7.38	mg/dl	106	79.0 - 133
	HumaStar analyzer	mmol/l	5.34	4.70 - 5.99	mg/dl	96.3	84.7 - 108
<b>GOT (ASAT) IFCC mod. IiquiUV</b> Enzymatic, 37°C, IFCC without P5P	HumaLyzor photometer	µkat/l	0.47	0.40 - 0.54	U/l	28.0	23.9 - 32.1
	HumaStar analyzer	µkat/l	0.43	0.37 - 0.49	U/l	25.8	22.2 - 29.3
<b>GPT (ALAT) IFCC mod. IiquiUV</b> Enzymatic, 37°C, IFCC without P5P	HumaLyzor photometer	µkat/l	0.51	0.46 - 0.57	U/l	30.6	27.3 - 33.9
	HumaStar analyzer	µkat/l	0.52	0.41 - 0.62	U/l	30.9	24.7 - 37.2
<b>HDL CHOLESTEROL</b> Precipitation method	HumaLyzor photometer	mmol/l	2.24	1.93 - 2.54	mg/dl	86.6	74.8 - 98.4
<b>IRON Iiquicolor</b> CAB	HumaLyzor photometer	µmol/l	20.4	14.4 - 26.5	µg/dl	114	80.3 - 148
	HumaStar analyzer	µmol/l	24.7	18.4 - 31.1	µg/dl	138	103 - 174
<b>IRON TPTZ Iiquicolor</b> TPTZ	HumaLyzor photometer	µmol/l	23.3	20.4 - 26.1	µg/dl	130	114 - 146
	HumaStar analyzer	µmol/l	23.7	21.0 - 26.3	µg/dl	132	117 - 147

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<b>LDH SCE mod. liquiUV</b> Substrate Pyruvate, 37°C	HumaLyzer photometer	µkat/l	6.47	4.50 - 8.44	U/l	388	270 - 506
	HumaStar analyzer	µkat/l	6.18	5.60 - 6.77	U/l	371	336 - 406
<b>MAGNESIUM liquicolor</b> Xylidyl blue	HumaLyzer photometer	mmol/l	0.82	0.70 - 0.94	mg/dl	1.99	1.69 - 2.29
	HumaStar analyzer	mmol/l	0.77	0.67 - 0.87	mg/dl	1.87	1.63 - 2.11
<b>PANCREAS-AMYLASE liquicolor</b> EPS-G7, 37°C	HumaLyzer photometer	µkat/l	1.27	1.09 - 1.45	U/l	76.0	65.3 - 86.7
	HumaStar analyzer	µkat/l	1.32	1.15 - 1.50	U/l	79.4	69.0 - 89.8
<b>PHOSPHORUS liquirapid</b> Molybdate (UV)	HumaLyzer photometer w/o HL4000	mmol/l	1.59	1.43 - 1.74	mg/dl	4.91	4.43 - 5.38
	HumaLyzer 4000	mmol/l	1.65	1.28 - 2.03	mg/dl	5.12	3.95 - 6.28
	HumaStar analyzer	mmol/l	1.44	1.28 - 1.60	mg/dl	4.47	3.97 - 4.97
<b>Potassium</b> ISE direct	HumaStar 600, Humalyte	mmol/l	4.79	4.32 - 5.26	mval/l	4.79	4.32 - 5.26
<b>POTASSIUM liquirapid</b> Precipitation method	HumaLyzer photometer	mmol/l	4.30	3.16 - 5.44	mval/l	4.30	3.16 - 5.44
<b>POTASSIUM liquiUV</b> Enzymatic	HumaLyzer photometer	mmol/l	4.91	3.84 - 5.97	mval/l	4.91	3.84 - 5.97
	HumaStar analyzer	mmol/l	5.05	4.33 - 5.77	mval/l	5.05	4.33 - 5.77
<b>Sodium</b> ISE direct	HumaStar 600	mmol/l	112	110 - 114	mval/l	112	110 - 114
	Humalyte	mmol/l	121	114 - 127	mval/l	121	114 - 127
<b>SODIUM liquicolor</b> Enzymatic	HumaLyzer photometer	mmol/l	98.0	87.0 - 109	mval/l	98.0	87.0 - 109
	HumaStar analyzer	mmol/l	109	99.9 - 119	mval/l	109	99.9 - 119
<b>SODIUM RAPID</b> Precipitation method	HumaLyzer photometer	mmol/l	95.7	78.3 - 113	mval/l	95.7	78.3 - 113
<b>TIBC</b> Fe saturation Fe determination using IRON liquicolor	HumaStar analyzer	µmol/l	68.4	60.9 - 75.9	µg/dl	382	340 - 424
<b>TIBC</b> Fe saturation Fe determination using IRON TPTZ liquicolor	HumaStar analyzer	µmol/l	77.3	63.2 - 91.6	µg/dl	432	353 - 512
<b>TOTAL PROTEIN liquicolor</b> Biuret	HumaLyzer photometer	g/l	61.7	57.6 - 65.8	g/dl	6.17	5.76 - 6.58
	HumaStar analyzer	g/l	62.3	56.9 - 67.7	g/dl	6.23	5.69 - 6.77
<b>TRIGLYCERIDES liquicolor<sup>mono</sup></b> GPO POD	HumaLyzer photometer	mmol/l	1.01	0.88 - 1.13	mg/dl	88.2	77.6 - 98.7
	HumaStar analyzer	mmol/l	1.07	0.90 - 1.24	mg/dl	94.0	78.7 - 109
<b>UREA liquicolor</b> Berthelot mod.	HumaLyzer photometer	mmol/l	4.86	3.95 - 5.78	mg/dl	29.2	23.7 - 34.7
<b>UREA liquiUV</b> Urease	HumaLyzer photometer	mmol/l	4.76	3.95 - 5.59	mg/dl	28.6	23.7 - 33.6
	HumaStar analyzer	mmol/l	4.71	3.86 - 5.54	mg/dl	28.3	23.2 - 33.3
<b>URIC ACID liquicolor<sup>plus</sup></b> Uricase with ascorbate oxidase	HumaLyzer photometer w/o HL4000	µmol/l	338	303 - 372	mg/dl	5.68	5.10 - 6.26
	HumaLyzer 4000	µmol/l	285	229 - 341	mg/dl	4.79	3.85 - 5.73
	HumaStar analyzer	µmol/l	293	261 - 325	mg/dl	4.92	4.38 - 5.46
<b>URIC ACID liquicolor</b> Uricase	HumaLyzer photometer	µmol/l	334	278 - 389	mg/dl	5.61	4.68 - 6.54
	HumaStar analyzer	µmol/l	333	239 - 427	mg/dl	5.60	4.01 - 7.18