

## STANDARD SPECIFICATIONS

Parameter	Unit	Pilsener Malt made of			Pale Ale Malt	Vienna type malt	Munich type malt		Caramel malt (kiln)			Wheat-malt
		Spring barley	2 row winter-barley	6-row winter-barley			light	dark	light	medium	dark	
Moisture	%	max 4.5	max 4.5	max 4.5	max 4.5	max 4.5	max 4.5	max 4.5	max 5.0	max 5.0	max 5.0	max 5.0
Extract dry matter	%	min 80.5	min 79.5	min 78.5	min 80.0	min 80.0	min 80.0	min 80.0	min 78.0	min 78.0	min 78.0	min 83.0
Fine coarse difference	%	max 2.0	max 2.0	max 2.3	max 2.0	max 2.0	max 2.0	max 2.0				max 2.0
Wort colour	EBC	3.0 - 4.0	3.0 - 4.0	3.0 - 4.0	5.0 - 8.0	8.0 - 12.0	15 - 22	28 - 32	15 - 25	30 - 40	55 - 65	max 4.5
Boiled wort colour	EBC	5.0 - 6.0	5.0 - 6.5	5.0 - 6.5	7.0 - 10.0	10.0 - 20.0	18 - 37	32 - 40				max 7.0
Total Protein	%	9.2 - 11.5	9.3 - 11.5	max 11.5	max 11.5	max 11.5	max 11.5	max 11.5	max 11.5	max 11.5	max 11.5	max 13.5
Soluble Nitrogen	mg/100g	600 - 750	630 - 750	630 - 780	630 - 770	610 - 750	620 - 750	620 - 750				650 - 780
Soluble Protein	%	3.8 - 4.7	3.9 - 4.7	3.9 - 4.9	3.9 - 4.8	4.1 - 4.7	3.8 - 4.7	3.8 - 4.7				4.1 - 4.9
SNR	%	36 - 44	36 - 44	36 - 45	37 - 44	38 - 45	36 - 45	36 - 45				35 - 44
FAN	mg/l	min 100	min 100	min 100	min 120	min 120	min 100	min 105				min 90.0
Wort pH		min 5.80	min 5.80	min 5.80	min 5.80	min 5.80	min 5.50	min 5.50	min 5.50	min 5.50	min 5.50	min 5.80
Viscosity	mPas	max 1.60	max 1.65	max 1.65	max 1.60	max 1.65	max 1.65	max 1.65				max 1.90
Friability	%	min 82	min 80	min 78	min 80	min 78	min 78	min 78				
Whole unmodified grains	%	max 2.0	max 2.0	max 2.0	max 2.0	max 2.0	max 2.0	max 2.0				
beta-Glucan	mg/l	max 300	max 350	max 350	max 300	max 350	max 350	max 350				
Saccharification time	min	max 15	max 15	max 15	max 15	max 20	max 15-20	max 15-20	max 30	max 30	max 30	max 20
Diastatic power	WK	min 220	min 250	min 260	min 200	min 200	min 200	min 200				min 150
Final attenuation	%	min 79	min 79.0	min 79.0	min 78.0	min 79	min 78	min 78				min 80
Sieving >2.5mm	%	min 90.0	min 90.0	min 90.0	min 90.0	min 90.0	min 90.0	min 90.0	min 90.0	min 90.0	min 90.0	min 90.0
Rejects <2.2mm	%	max 2.0	max 2.0	max 2.0	max 2.0	max 2.0	max 2.0	max 2.0				max 2.0
NDMA	ppb	max 2.5	max 2.5	max 2.5	max 2.5	max 2.5	max 2.5	max 2.5				max 2.5

All barley malts are made from selected malting barley of prominent areas in Germany, France, Denmark, Sweden and UK. Only recommended and approved varieties are used. Production complies with German food law and EU regulations. The ranges mentioned can be adopted to customers' needs. Changes and variations may be driven by crop quality.