

koźlok 2

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **20**
- SRM **16.7**
- Style **Traditional Bock**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **100 min**
- Evaporation rate **10 %/h**
- Boil size **16.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.2 liter(s)**
- Total mash volume **18.3 liter(s)**

Steps

- Temp **62 C**, Time **15 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **14.2 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **15 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **6 liter(s)** of **76C** water or to achieve **16.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	castle- Light Munich Malt	2.3 kg (56.5%)	82 %	14
Grain	red active	0.7 kg (17.2%)	79 %	35
Grain	BESTMALZ - Best Melanoidin	0.2 kg (4.9%)	75 %	71
Grain	Caramunich® typ I	0.22 kg (5.4%)	73 %	80
Grain	castle - Vienna Malt	0.6 kg (14.7%)	77.5 %	7
Grain	weyermann - Pszeniczny Czekoladowy	0.05 kg (1.2%)	73 %	1001

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Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	12 g	60 min	10.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
wyeast munich lager	Lager	Slant	200 ml	---