Koźlaczek konkursowy

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **21**
- SRM **20.4**
- Style **Traditional Bock**

Batch size

- Expected quantity of finished beer **10.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **20 %/h**
- Boil size **15.7 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **14 liter(s)**

Steps

- Temp **66 C**, Time **30 min**
- Temp **99 C**, Time **10 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **10 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **30 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Keep mash **10 min** at **99C**
- Sparge using **9.7 liter(s)** of **76C** water or to achieve **15.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	2.4 kg *(60%)*	79 %	22
Grain	Melanoiden Malt	0.1 kg *(2.5%)*	80 %	80
Grain	Caraaroma	0.2 kg *(5%)*	78 %	400
Grain	Caramunich® typ I	0.3 kg *(7.5%)*	73 %	80
Grain	Pilzneński	1 kg *(25%)*	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	9 g	60 min	12.9 %