Koźlaczek

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **21**
- SRM **16.4**
- Style **Traditional Bock**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **19.9 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **14.5 liter(s)**
- Total mash volume **19.8 liter(s)**

Steps

- Temp **50 C**, Time **1 min**
- Temp **62 C**, Time **30 min**
- Temp **100 C**, Time **20 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **14.5 liter(s)** of strike water to **55.5C**
- Add grains
- Keep mash **1 min** at **50C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Keep mash **20 min** at **100C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **19.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.3 kg *(42.9%)*	81 %	4
Grain	Monachijski	1.44 kg *(26.9%)*	80 %	16
Grain	Strzegom Wiedeński	1 kg *(18.7%)*	79 %	10
Grain	Weyermann - Caraamber	0.25 kg *(4.7%)*	75 %	65
Grain	Viking melanoidynowy	0.25 kg *(4.7%)*	75 %	60
Grain	Weyermann - Carafa II	0.12 kg *(2.2%)*	70 %	837

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Saflager W 34/70	Lager	Dry	23 g	Fermentis

Notes

- Dekokcja jednowarowa: odebrać 1/3 zacieru
  Sep 22, 2020, 11:37 PM