

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 % |