

## 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 |

koniec zacierania

### 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 | ---        |