

## koźlok 3

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- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **24**
- SRM **17.9**
- 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 **120 min**
- Evaporation rate **10 %/h**
- Boil size **16.6 liter(s)**

### Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.2 liter(s)**
- Total mash volume **18.2 liter(s)**

### Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 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 **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **6.5 liter(s)** of **76C** water or to achieve **16.6 liter(s)** of wort

### Fermentables

| Type  | Name                        | Amount          | Yield | EBC |
|-------|-----------------------------|-----------------|-------|-----|
| Grain | Strzegom Monachijski typ I  | 2.34 kg (57.8%) | 79 %  | 16  |
| Grain | Viking Pale Ale malt        | 0.66 kg (16.3%) | 80 %  | 5   |
| Grain | red active                  | 0.5 kg (12.3%)  | 79 %  | 35  |
| Grain | Weyermann - Carapils        | 0.15 kg (3.7%)  | 78 %  | 4   |
| Grain | Weyermann - Chocolate Wheat | 0.1 kg (2.5%)   | 74 %  | 788 |
| Grain | red ale viking malt         | 0.3 kg (7.4%)   | 75 %  | 70  |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Oktawia | 20 g   | 60 min | 7.1 %      |

### Yeasts

| Name                    | Type  | Form  | Amount | Laboratory |
|-------------------------|-------|-------|--------|------------|
| FM703 skórzane spodenki | Lager | Slant | 300 ml | ---        |