

## 26# Koźlak wędzony

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **24**
- SRM **14**
- Style **Traditional Bock**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

### Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **17.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Wędzony bukiem Viking Malt	4 kg (67.8%)	82 %	10
Grain	Monachijski	1.5 kg (25.4%)	80 %	16
Grain	Strzegom Karmel 300	0.4 kg (6.8%)	70 %	299

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	35 g	60 min	7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
w34-70	Lager	Slant	110 ml	---