

Koźlak wędzony

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **27**
- SRM **7.9**
- Style **Traditional Bock**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.3 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **31.5 liter(s)**
- Total mash volume **40.5 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **31.5 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **5.8 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (55.6%)	80 %	5
Grain	Wędzony torfem Viking Malt	2 kg (22.2%)	82 %	10
Grain	Strzegom Karmel 30	0.6 kg (6.7%)	75 %	30
Grain	Płatki pszeniczne	0.5 kg (5.6%)	60 %	3
Grain	Strzegom Monachijski typ I	0.9 kg (10%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	31 g	60 min	8 %
Aroma (end of boil)	Chinook	23 g	5 min	6.2 %
Aroma (end of boil)	Junga	23 g	5 min	10 %
Aroma (end of boil)	Saaz (Czech Republic)	10 g	5 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Slant	200 ml	---
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