

ŚWIĄTECZNY PIERNIK

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **21**
- SRM **15.9**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21.8 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **31.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (56.3%)	81 %	4
Grain	Monachijski typ II	2 kg (28.2%)	79 %	22
Sugar	Laktoza	0.5 kg (7%)	76.1 %	0
Grain	Caramunich 3	0.5 kg (7%)	76 %	150
Grain	Carafa Special III	0.1 kg (1.4%)	70 %	1400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Tradition	50 g	60 min	5.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale T-58	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Spice	Cynamon	15 g	Boil	5 min

Spice	Goździki	15 g	Boil	5 min
Spice	Kolendra	15 g	Boil	5 min