

badziewie świąteczne

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **21**
- SRM **34.6**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **51 C**, Time **10 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **56.2C**
- Add grains
- Keep mash **10 min** at **51C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (66.7%)	80 %	5
Grain	Strzegom Monachijski typ I	1 kg (16.7%)	79 %	16
Grain	Strzegom Karmel 150	0.2 kg (3.3%)	75 %	150
Grain	Strzegom Karmel 300	0.2 kg (3.3%)	70 %	299
Grain	Czekoladowy	0.4 kg (6.7%)	60 %	788
Grain	Barwiący	0.2 kg (3.3%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	50 g	60 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
t58	Ale	Slant	100 ml	---

Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Spice	przyprawa do piernika	100 g	Boil	10 min