

Świąteczne

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **27**
- SRM **31**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	4 kg (70.2%)	85 %	4
Grain	Monachijski	1.2 kg (21.1%)	80 %	16
Grain	Strzegom Czekoladowy ciemny	0.5 kg (8.8%)	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	10 %
Boil	Lublin (Lubelski)	25 g	5 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	6 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Spice	Przyprawa korzenna (piernikowa)	45 g	Boil	5 min
Spice	Przyprawa korzenna (piernikowa)	45 g	Secondary	7 day(s)