

Piwo na Boże Narodzenie ciemne

- Gravity **20.5 BLG**
- ABV **9 %**
- IBU **29**
- SRM **17.3**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **14.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.2 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.25 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **24.7 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **18.9 liter(s)** of strike water to **74.2C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **76C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (85.9%)	85 %	7
Grain	Carabelge	0.3 kg (5.2%)	80 %	30
Grain	Caramunich® typ I	0.2 kg (3.4%)	73 %	80
Grain	Płatki owsiane	0.2 kg (3.4%)	60 %	3
Grain	Jęczmień palony	0.12 kg (2.1%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz	75 g	50 min	2.95 %
Boil	Styrian Golding	30 g	15 min	3.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew BE-256	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
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Flavor	Skórka słodkiej pomarańczy	17 g	Boil	15 min
Spice	Kolendra	5 g	Boil	15 min
Spice	Cynamon cięty	3.5 g	Boil	15 min
Spice	Imbir cięty	2.2 g	Boil	15 min