

Porter brazowo kakaowy

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **29**
- SRM **17**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **37 liter(s)**
- Trub loss **3 %**
- Size with trub loss **40 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **48.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **35 liter(s)**
- Total mash volume **45 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **35 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **23.1 liter(s)** of **76C** water or to achieve **48.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (50%)	80 %	5
Grain	Słód owsiany Fawcett	2 kg (20%)	61 %	5
Grain	Pszeniczny	1 kg (10%)	85 %	4
Grain	Brown Malt (British Chocolate)	1 kg (10%)	70 %	128
Grain	Castle Cafe	0.5 kg (5%)	75.5 %	480
Grain	Karmelowy Pszeniczny Strzegom	0.5 kg (5%)	79 %	130

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	50 g	40 min	11 %
Aroma (end of boil)	Sorachi Ace	50 g	1 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Dry	11 g	Danstar

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	ziarno kakaowca	250 g	Boil	10 min