

Polish Brown Ale

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **38**
- SRM **24.8**
- Style **American Brown Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.7 liter(s)**
- Total mash volume **31.7 liter(s)**

Steps

- Temp **66.6 C**, Time **40 min**
- Temp **74 C**, Time **20 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **24.7 liter(s)** of strike water to **73.3C**
- Add grains
- Keep mash **40 min** at **66.6C**
- Keep mash **20 min** at **74C**
- Keep mash **5 min** at **77C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **27 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (70.9%)	80 %	5
Grain	Strzegom Pilzneński	1 kg (14.2%)	80 %	4
Grain	Carabelge	0.5 kg (7.1%)	80 %	30
Grain	Strzegom Czekoladowy ciemny	0.3 kg (4.3%)	68 %	1200
Grain	Strzegom Karmel 150	0.25 kg (3.5%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Oktawia	35 g	60 min	7.1 %
Boil	Oktawia	15 g	30 min	7.1 %
Aroma (end of boil)	Oktawia	25 g	5 min	7.1 %