

Tawaret

- Gravity **20.5 BLG**
- ABV **9 %**
- IBU **16**
- SRM **20.5**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.9 liter(s)**
- Total mash volume **22.6 liter(s)**

Steps

- Temp **68 C**, Time **40 min**
- Temp **75 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **20 min** at **75C**
- Keep mash **5 min** at **78C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale ale / Malteurop	3.5 kg (56.9%)	85 %	7
Grain	Wędzony bukiem / Viking Malt	0.5 kg (8.1%)	82 %	10
Grain	Pszeniczny wędzony dębem / Viking Malt	0.5 kg (8.1%)	80 %	3
Grain	Brown / Fawcett	0.75 kg (12.2%)	70 %	150
Sugar	Candi Sugar, Clear	0.5 kg (8.1%)	78 %	2
Grain	Crystal Rye / Fawcett	0.3 kg (4.9%)	70 %	150
Grain	Pale Chocolate / Fawcett	0.1 kg (1.6%)	70 %	600

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bramling Cross	10 g	60 min	4 %
Boil	Mount Hood	20 g	60 min	5.5 %
Whirlpool	Mount Hood	20 g	20 min	5.5 %
Whirlpool	Bramling Cross	20 g	20 min	4 %
Dry Hop	Mount Hood	10 g	5 day(s)	5.5 %

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Yeasts

Name	Type	Form	Amount	Laboratory
B4 English Ale	Ale	Dry	20 g	Bulldog

Extras

Type	Name	Amount	Use for	Time
Spice	Aidżwan (Ajwain) przyprażony	5 g	Boil	10 min
Spice	Gruszki wędzone macerowane w Ararat Brandy 5*	300 g	Secondary	15 day(s)