

#1 English Pale Ale (?)

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **40**
- SRM **7.1**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **71 C**, Time **15 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **71C**
- Keep mash **10 min** at **77C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter Crisp	5 kg (87.7%)	80 %	5
Grain	Crystal II 200	0.2 kg (3.5%)	71 %	200
Adjunct	Pszenica niesłodowana	0.5 kg (8.8%)	75 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	25 g	60 min	7.1 %
Boil	Cascade	10 g	20 min	7.1 %
Boil	Citra	15 g	20 min	13.5 %
Aroma (end of boil)	Cascade	10 g	5 min	7.1 %
Aroma (end of boil)	Citra	15 g	5 min	13.5 %
Dry Hop	Cascade	10 g	7 day(s)	7.1 %
Dry Hop	Citra	20 g	7 day(s)	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	5 g	Safale

Extras

Type	Name	Amount	Use for	Time
Herb	Mech Irlandzki	5 g	Boil	15 min
Water Agent	Gips piwowarski	5 g	Mash	---