

Pale Ale

- Gravity **10.8 BLG**
- ABV ---
- IBU **36**
- SRM **9.5**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **17.9 liter(s)**

Steps

- Temp **68 C**, Time **0 min**
- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **73.3C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.4 kg (63.2%)	81 %	4
Grain	Weyermann - Pale Ale Malt	0.8 kg (21.1%)	85 %	7
Grain	Carahell	0.2 kg (5.3%)	77 %	26
Grain	Caramunich Malt	0.4 kg (10.5%)	71.7 %	110

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	26 g	60 min	10 %
Boil	Kent Goldings	5 g	20 min	5.5 %
Boil	Kent Goldings	10 g	5 min	5.5 %
Boil	Kent Goldings	10 g	0 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - London Ale	Ale	Slant	200 ml	Wyeast Labs

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	15 min