

English Pale Ale

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **19**
- SRM **5.3**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **15 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **15 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter	2 kg (57.1%)	81 %	6
Grain	Viking Pale Ale malt	1 kg (28.6%)	80 %	5
Grain	Colorado Honig	0.5 kg (14.3%)	80 %	13

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	5 g	60 min	9 %
Boil	Challenger	10 g	30 min	7 %
Boil	Fuggles	15 g	5 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM11 Wichrowe Wzgórza	Ale	Liquid	50 ml	Fermentum Mobile