

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **28**
- SRM **6.6**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **22.1 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (79.4%)	80 %	5
Grain	Abbey Castle	0.5 kg (7.9%)	80 %	45
Grain	Biscuit Malt	0.5 kg (7.9%)	79 %	45
Grain	Platki owsiane	0.3 kg (4.8%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	30 g	60 min	5.3 %
Boil	Fuggles	60 g	15 min	5.3 %
Boil	Fuggles	60 g	0 min	5.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - 1275 Thames Valley Ale	Ale	Slant	200 ml	Wyeast Labs