

29.8

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **27**
- SRM **9**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **17.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **65 C**, Time **80 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **80 min** at **65C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **22.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter Crisp	5 kg (83.3%)	83 %	6
Grain	Crisp Amber Malt	1 kg (16.7%)	--- %	50

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	8.8 %
Aroma (end of boil)	Marynka	70 g	0 min	8.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
classic english ale yeast	Ale	Dry	12 g	the malt miller