

## #3

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **39**
- SRM **3.9**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (100%)	80 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	25 g	15 min	10 %
Boil	Marynka	25 g	60 min	10 %
Dry Hop	Mosaic	75 g	6 day(s)	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

### Extras

Type	Name	Amount	Use for	Time
Spice	skórka grejpfruta	10 g	Boil	10 min
Fining	mech irlandzki	5 g	Boil	10 min
Flavor	płatki dębowe bourbon	20 g	Secondary	6 day(s)
Spice	skórka grejpfruta	15 g	Secondary	6 day(s)
Spice	skórka pomarańczy	10 g	Boil	10 min

Spice	skórka pomarańczy	15 g	Secondary	6 day(s)
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