

Magister

- Gravity **12.2 BLG**
- ABV ---
- IBU **34**
- SRM **10.5**
- Style **Standard/Ordinary Bitter**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.6 liter(s)**
- Total mash volume **22.2 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **16.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **0 min** at **76C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	5 kg (90.3%)	81 %	6
Grain	Carared	0.5 kg (9%)	75 %	39
Grain	Jęczmień palony	0.04 kg (0.7%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Kent Goldings	30 g	60 min	5.5 %
Boil	Kent Goldings	35 g	20 min	5.5 %
Boil	Kent Goldings	35 g	10 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

Extras

Type	Name	Amount	Use for	Time
Fining	Irish Moss	5 g	Boil	10 min