

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **23**
- SRM **3.8**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.5 liter(s)**
- Total mash volume **19.4 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **10 min** at **78C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (79.2%)	81 %	4
Grain	Maris Otter Crisp	0.85 kg (16.8%)	83 %	6
Adjunct	płatki jęczmienne	0.2 kg (4%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Enigma (AUS)	35 g	10 min	17.2 %
Aroma (end of boil)	Enigma (AUS)	15 g	0 min	17.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
us 05	Ale	Dry	12 g	---