

Maczao Pejl Ejl

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **38**
- SRM **5.1**
- Style **American 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 **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **48 C**, Time **10 min**
- Temp **67 C**, Time **30 min**
- Temp **72 C**, Time **4 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **52.7C**
- Add grains
- Keep mash **10 min** at **48C**
- Keep mash **30 min** at **67C**
- Keep mash **4 min** at **72C**
- Sparge using **16.8 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 (90.9%)	80 %	5
Grain	Karmelowy Jasny 30EBC	0.5 kg (9.1%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	35 g	60 min	4.5 %
Boil	Marynka	15 g	60 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	20 g	45 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
US 04	Ale	Dry	11 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	3 g	Mash	---

Fining	Whirfloc t	1 g	Boil	45 min
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