

emigrant

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **71**
- SRM **4.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **15.4 liter(s)**

Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.3 liter(s)**
- Total mash volume **12.4 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **71 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **9.3 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **25 min** at **71C**
- Keep mash **10 min** at **78C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **15.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	2.2 kg (71%)	81 %	6
Grain	Pszeniczny	0.5 kg (16.1%)	85 %	4
Grain	Płatki owsiane	0.2 kg (6.5%)	85 %	3
Grain	płatki jęczmienne	0.2 kg (6.5%)	85 %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	El Dorado	10 g	60 min	11.6 %
Aroma (end of boil)	Mosaic	10 g	30 min	11.8 %
Whirlpool	El Dorado	20 g	30 min	11.6 %
Whirlpool	Centennial	15 g	30 min	9.5 %
Whirlpool	Amarillo	20 g	30 min	8.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	11 g	Safbrew