

duzy

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **61**
- SRM **5.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.7 liter(s)**
- Total mash volume **30.2 liter(s)**

Steps

- Temp **63 C**, Time **45 min**
- Temp **71 C**, Time **25 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **22.7 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **25 min** at **71C**
- Keep mash **10 min** at **77C**
- Sparge using **17.9 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	5 kg (66.2%)	81 %	6
Grain	Briess - Pilsen Malt	1 kg (13.2%)	80.5 %	2
Grain	Munich Malt	0.75 kg (9.9%)	80 %	18
Grain	Łatki owsiane	0.4 kg (5.3%)	60 %	3
Grain	Corn, Flaked	0.4 kg (5.3%)	80 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	25 g	60 min	13.2 %
Boil	Chinook	25 g	30 min	13 %
Aroma (end of boil)	Amarillo	20 g	10 min	9.5 %
Whirlpool	Mosaic	20 g	30 min	10 %
Whirlpool	Amarillo	20 g	30 min	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Mangrove Jack's M12 Voss Kveik	Ale	Dry	10 g	Mangrove Jack's
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