

## Brąz cytrusy

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **48**
- SRM **26**
- Style **Brown IPA**

### 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 **3.2 liter(s) / kg**
- Mash size **20.5 liter(s)**
- Total mash volume **26.9 liter(s)**

### Steps

- Temp **64 C**, Time **80 min**

### Mash step by step

- Heat up **20.5 liter(s)** of strike water to **70.9C**
- Add grains
- Keep mash **80 min** at **64C**
- Sparge using **13.7 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 (72.5%)	80 %	5
Grain	Biscuit Malt	0.5 kg (7.2%)	79 %	45
Grain	Jęczmień palony	0.25 kg (3.6%)	55 %	985
Grain	Carafa	0.25 kg (3.6%)	70 %	664
Grain	Płatki owsiane	0.4 kg (5.8%)	85 %	3
Sugar	Brown Sugar, Dark	0.5 kg (7.2%)	100 %	99

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mount Hood	60 g	60 min	5.5 %
Boil	Centennial	30 g	20 min	10.5 %
Aroma (end of boil)	Mosaic	20 g	5 min	10 %
Dry Hop	Centennial	10 g	7 day(s)	10.5 %
Dry Hop	Mosaic	15 g	7 day(s)	10 %
Dry Hop	Simcoe	30 g	7 day(s)	13.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
US - 05	Ale	Dry	11.5 g	---