

Apka z dupy

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **36**
- SRM **5.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **39 liter(s)**
- Trub loss **5 %**
- Size with trub loss **41 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **49.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.5 liter(s)**
- Total mash volume **38 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **28.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **30.4 liter(s)** of **76C** water or to achieve **49.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	7.5 kg (78.9%)	80 %	7
Grain	Carahell	0.5 kg (5.3%)	77 %	26
Grain	Pszeniczny	1.5 kg (15.8%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Citra	15 g	90 min	12 %
Aroma (end of boil)	Citra	30 g	10 min	15 %
Whirlpool	Citra	20 g	30 min	12 %
Whirlpool	Citra	20 g	30 min	12 %
Whirlpool	Citra	80 g	3 min	12 %