Aroma IPA

- Gravity **15.5 BLG**
- ABV **---**
- IBU **69**
- SRM **13.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **10 %**
- Size with trub loss **33 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **38 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **22 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg *(62.5%)*	85 %	7
Grain	Strzegom Wiedeński	1 kg *(12.5%)*	79 %	10
Grain	Pilzneński	1 kg *(12.5%)*	81 %	4
Grain	Caramunich Malt	1 kg *(12.5%)*	71.7 %	110

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Waimea	120 g	15 min	17 %
Whirlpool	Waimea	90 g	20 min	17 %
Dry Hop	Waimea	90 g	3 day(s)	17 %

Yeasts

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

Notes

- słód caramunich TYP I dodajemy na 72C,
  Whirpool w temperaturze 77C

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Dec 24, 2015, 1:28 PM