IPA żaglówki

- Gravity **18 BLG**
- ABV **---**
- IBU **33**
- SRM **11.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **71 C**, Time **5 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **71C**
- Keep mash **5 min** at **76C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg *(75.8%)*	81 %	4
Grain	Pszeniczny	1 kg *(15.2%)*	85 %	4
Grain	Caramunich	0.4 kg *(6.1%)*	71.7 %	120
Grain	Weyermann - Carared	0.2 kg *(3%)*	75 %	45

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	8 g	60 min	13.5 %
Boil	cascade	10 g	60 min	6.8 %
Boil	cascade	10 g	30 min	6.8 %
Boil	Cascade	15 g	15 min	6.8 %
Boil	Cascade	15 g	10 min	6.8 %
Boil	Cascade	20 g	5 min	6 %
Whirlpool	Cascade	30 g	0 min	6 %
Dry Hop	simcoe	50 g	5 day(s)	13 %

Yeasts

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

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	50 g	---