1 na 100 pierwsza próba

- Gravity **8.5 BLG**
- ABV **3.3 %**
- IBU **22**
- SRM **4.7**
- 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 **30.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **17.4 liter(s)**

Steps

- Temp **72 C**, Time **60 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **79.5C**
- Add grains
- Keep mash **60 min** at **72C**
- Sparge using **20.8 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	3.05 kg *(78.8%)*	79 %	10
Grain	Carahell	0.3 kg *(7.8%)*	77 %	26
Grain	Viking Pale Ale malt	0.52 kg *(13.4%)*	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %
Boil	Citra	5 g	45 min	12 %
Dry Hop	Cascade	20 g	4 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

Extras

Type	Name	Amount	Use for	Time
Flavor	Curacao	10 g	Boil	15 min