Last summer

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **92**
- SRM **4.9**
- Style **American 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 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **27.6 liter(s)**

Steps

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

Mash step by step

- Heat up **20.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **76C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	mep Pilzneński	3 kg *(43.5%)*	81 %	5
Grain	mep Pale ale	3 kg *(43.5%)*	85 %	6
Grain	Płatki owsiane	0.4 kg *(5.8%)*	85 %	3
Grain	Płatki ryżowe	0.25 kg *(3.6%)*	85 %	3
Grain	Pszeniczny	0.25 kg *(3.6%)*	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	40 g	60 min	15.5 %
Boil	Cascade	25 g	5 min	6 %
Boil	Centennial	25 g	5 min	10.5 %
Boil	Simcoe	25 g	5 min	13.2 %
Whirlpool	Cascade	25 g	30 min	6 %
Whirlpool	Centennial	25 g	30 min	10.5 %
Whirlpool	Simcoe	25 g	30 min	13.2 %
Dry Hop	Simcoe	50 g	5 day(s)	13.2 %
Dry Hop	Columbus/Tomahawk/Zeus	30 g	5 day(s)	15.5 %

Yeasts

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

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	150 ml	Fermentis