

## Session One Hop-Hop

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- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **23**
- SRM **2.8**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **17 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

### Mash step by step

- Heat up **12.8 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **77C**
- Sparge using **20.5 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3 kg (70.6%)	82 %	4
Grain	Jęczmień niesłodowany	0.5 kg (11.8%)	75 %	2
Grain	Płatki owsiane	0.75 kg (17.6%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Cascade PL	125 g	30 min	4.5 %
Dry Hop	Cascade PL	75 g	3 day(s)	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	Safale