

## #6 Single Hop Cascade

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **47**
- SRM **4.9**
- 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 **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

### Steps

- Temp **54 C**, Time **10 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **16.5 liter(s)** of strike water to **59.7C**
- Add grains
- Keep mash **10 min** at **54C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (90.9%)	80 %	5
Grain	Strzegom Pszeniczny	0.25 kg (4.5%)	81 %	6
Grain	Karmelowy Jasny 30EBC	0.25 kg (4.5%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	50 g	60 min	7.7 %
Boil	Cascade	20 g	15 min	6.9 %
Boil	Cascade	20 g	5 min	6.9 %
Boil	Cascade	20 g	0 min	6.9 %
Dry Hop	Cascade	30 g	4 day(s)	6.9 %
Dry Hop	Cascade	10 g	2 day(s)	6.9 %

### Yeasts

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