

single hop cascade ipa

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **39**
- SRM **28.7**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.7 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (40.8%)	81 %	4
Grain	Bestmalz Red X	1 kg (20.4%)	79 %	30
Grain	Pszeniczny	0.5 kg (10.2%)	85 %	4
Grain	Płatki pszeniczne	0.5 kg (10.2%)	60 %	3
Grain	Karmelowy 50 - Viking Malt	0.5 kg (10.2%)	79 %	50
Grain	Jęczmień palony	0.1 kg (2%)	55 %	985
Grain	Czekoladowy	0.15 kg (3.1%)	60 %	788
Grain	Carafa II	0.15 kg (3.1%)	70 %	812

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	10 g	60 min	6 %
Aroma (end of boil)	Cascade	40 g	60 min	6 %
Dry Hop	Cascade	50 g	5 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Gęstwa po ipce	Ale	Slant	100 ml	Moje