

Cascade IPA

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **64**
- SRM **4.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14 liter(s)**
- Boil time **90 min**
- Evaporation rate **17 %/h**
- Boil size **19.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.9 liter(s)**
- Total mash volume **15.3 liter(s)**

Steps

- Temp **66 C**, Time **90 min**

Mash step by step

- Heat up **11.9 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **90 min** at **66C**
- Sparge using **10.7 liter(s)** of **76C** water or to achieve **19.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (44.1%)	80 %	5
Grain	Viking Pilsner malt	1.5 kg (44.1%)	82 %	4
Grain	Płatki owsiane	0.2 kg (5.9%)	85 %	3
Grain	Viking Pale Cookie	0.2 kg (5.9%)	79 %	25

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	90 min	8.5 %
Boil	Cascade	10 g	10 min	5.8 %
Aroma (end of boil)	Cascade	15 g	20 min	5.8 %
Whirlpool	Cascade	25 g	20 min	5.8 %
Dry Hop	Cascade	50 g	3 day(s)	5.8 %

Yeasts

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