

PPA Izabella single hop

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **21**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **39 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **48 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **35 liter(s)**
- Total mash volume **45 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **35 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **23 liter(s)** of **76C** water or to achieve **48 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	10 kg (100%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Izabella	40 g	60 min	5.8 %
Aroma (end of boil)	Izabella	60 g	10 min	5.8 %
Dry Hop	Izabella	200 g	3 day(s)	5.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
US05	Ale	Dry	22 g	---