

Hoppy Amarillo / Cascade APA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **44**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **17.5 %**
- Size with trub loss **23.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **31.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

- Temp **65 C**, Time **70 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **15 min** at **78C**
- Sparge using **17.9 liter(s)** of **76C** water or to achieve **31.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6 kg (90.9%)	79 %	5
Grain	Oats, Flaked	0.3 kg (4.5%)	80 %	2
Grain	Wheat, Flaked	0.3 kg (4.5%)	77 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Amarillo	30 g	70 min	9.5 %
Aroma (end of boil)	Amarillo	24 g	15 min	9.5 %
Aroma (end of boil)	Mosaic	34 g	5 min	10 %
Dry Hop	Galaxy	60 g	5 day(s)	15 %
Dry Hop	Cascade	100 g	5 day(s)	6 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Fining	Irish Moss	5 g	Boil	10 min