

Amarillo single hop

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **29**
- SRM **3.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **68 C**, Time **70 min**

Mash step by step

- Heat up **17 liter(s)** of strike water to **75.1C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **28.1 liter(s)** of wort

Fermentables

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

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	20 g	60 min	9.5 %
Boil	Amarillo	20 g	15 min	9.5 %
Whirlpool	Amarillo	25 g	0 min	9.5 %
Dry Hop	Amarillo	35 g	4 day(s)	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	---