

Amarillo Pale Ale

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **25**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **14.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (84.2%)	80 %	5
Grain	Pszeniczny	0.5 kg (10.5%)	85 %	4
Grain	Karmelowy Jasny 30EBC	0.25 kg (5.3%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galena	16 g	60 min	12 %
Aroma (end of boil)	Amarillo	25 g	5 min	9.5 %
Aroma (end of boil)	Amarillo	50 g	0 min	9.5 %
Dry Hop	Amarillo	55 g	3 day(s)	9.5 %