

## QAPA #2

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- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **52**
- SRM **5**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **0 %**
- Size with trub loss **12.4 liter(s)**
- Boil time **45 min**
- Evaporation rate **12 %/h**
- Boil size **15.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.9 liter(s)**
- Total mash volume **10.6 liter(s)**

### Steps

- Temp **66 C**, Time **75 min**
- Temp **75 C**, Time **10 min**

### Mash step by step

- Heat up **7.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **75 min** at **66C**
- Keep mash **10 min** at **75C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **15.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale Malt	2.3 kg (86.8%)	80 %	7
Grain	Pszeniczny	0.25 kg (9.4%)	77.09 %	3
Grain	CHÂTEAU ABBEY®	0.1 kg (3.8%)	78 %	58

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	12 g	45 min	13 %
Boil	Mosaic (HBC 369)	10 g	15 min	12.25 %
Boil	Citra	10 g	10 min	12 %
Boil	Simcoe	10 g	5 min	13 %
Boil	Citra	10 g	0 min	12 %
Boil	Mosaic (HBC 369)	10 g	0 min	12.25 %

### Yeasts

Name	Type	Form	Amount	Laboratory
f-602	Ale	Slant	150 ml	fermentum mobile

### Extras

Type	Name	Amount	Use for	Time
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Water Agent	Gips (Calcium Sulfate)	5.27 g	Mash	60 min
Water Agent	Siarczan Magnezu (MgSO4)	4.69 g	Mash	60 min
Water Agent	Chlorek Wapnia	2.88 g	Mash	60 min
Water Agent	Phosphoric Acid 85%	2.2 g	Mash	60 min
Water Agent	Sól	1.24 g	Mash	60 min