

AFRICAN QUEEN

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **50**
- SRM **4.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **14.8 liter(s)**
- Total mash volume **19.4 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **14.8 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **27.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	4 kg (88.9%)	80 %	5
Grain	Carahell	0.5 kg (11.1%)	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	African Queen	20 g	60 min	11 %
Boil	African Queen	20 g	30 min	11 %
Boil	African Queen	20 g	10 min	11 %
Dry Hop	African Queen	50 g	7 day(s)	11 %

Yeasts

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