

# Apa Amora preta

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **40**
- SRM **3.6**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **13.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.4 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **16.7 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **13 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **19.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.7 kg (100%)	81 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade PL	25 g	30 min	7.8 %
Aroma (end of boil)	Amora preta	10 g	10 min	11.2 %
Whirlpool	Amora preta	30 g	15 min	11.2 %
Dry Hop	Amora preta	60 g	4 day(s)	11.2 %