

# Pliny the elder

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- Gravity **18.7 BLG**
- ABV **8.1 %**
- IBU **111**
- SRM **9.4**
- Style **Imperial IPA**

## Batch size

- Expected quantity of finished beer **4.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **4.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **5.6 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **5.9 liter(s)**
- Total mash volume **7.8 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **65 min**
- Temp **76 C**, Time **15 min**

## Mash step by step

- Heat up **5.9 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **65 min** at **64C**
- Keep mash **15 min** at **76C**
- Sparge using **1.7 liter(s)** of **76C** water or to achieve **5.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) UK	1.6 kg (81.6%)	75 %	6
Grain	Briess - 2 Row Carapils Malt	0.05 kg (2.6%)	70 %	3
Grain	Briess - Wheat Malt, White	0.24 kg (12.2%)	75 %	5
Grain	Caramel/Crystal Malt - 40L	0.07 kg (3.6%)	74 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	12 g	60 min	15.5 %
Boil	Centennial	8 g	60 min	10.5 %
Boil	Mosaic	5 g	5 min	10 %
Boil	Centennial	5 g	5 min	10.5 %
Dry Hop	Centennial	15 g	3 day(s)	10.5 %
Dry Hop	Cascade	15 g	3 day(s)	6 %
Dry Hop	Mosaic	10 g	3 day(s)	10 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Mangrove Jack's M44 US West Coast	Ale	Slant	43 ml	Mangrove Jack's