

# ipa

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **38**
- SRM **5.4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **32 C**, Time **10 min**
- Temp **64 C**, Time **10 min**
- Temp **72 C**, Time **50 min**

## Mash step by step

- Heat up **17.3 liter(s)** of strike water to **34C**
- Add grains
- Keep mash **10 min** at **32C**
- Keep mash **10 min** at **64C**
- Keep mash **50 min** at **72C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) UK	5 kg (87%)	78 %	6
Grain	Caramel/Crystal Malt - 20L	0.25 kg (4.3%)	75 %	39
Grain	Płatki pszeniczne	0.5 kg (8.7%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	El Dorado	10 g	60 min	15 %
Boil	El Dorado	10 g	30 min	15 %
Aroma (end of boil)	El Dorado	20 g	10 min	15 %
Dry Hop	El Dorado	60 g	3 day(s)	15 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	200 ml	---