

# American pale ale

- Gravity **15.4 BLG**
- ABV ---
- IBU **62**
- SRM **17.7**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **24.4 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **68 C**, Time **80 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **80 min** at **68C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **30.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (71.4%)	79 %	6
Grain	Strzegom Pszeniczny	1 kg (14.3%)	81 %	6
Grain	Crystal 150 Castle	1 kg (14.3%)	74 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Palisade	20 g	30 min	7.5 %
Boil	Columbus/Tomahawk/Zeus	20 g	30 min	15.5 %
Boil	Palisade	20 g	15 min	7.5 %
Boil	Mosaic	20 g	15 min	10 %
Boil	Citra	20 g	10 min	12 %
Boil	Citra	20 g	5 min	12 %
Boil	Mosaic	20 g	5 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-5	Ale	Dry	11.5 g	---