

# Pale ALE USA

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- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **38**
- SRM **8.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **29.3 liter(s)**
- Total mash volume **39 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **29.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (41%)	80 %	5
Grain	Strzegom Pilzneński	1 kg (10.3%)	80 %	4
Grain	Pszenica niesłodowana	4 kg (41%)	75 %	3
Grain	Viking Wędzony torfem	0.5 kg (5.1%)	81 %	7
Grain	Strzegom Karmel 300	0.25 kg (2.6%)	70 %	299

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Enigma (AUS)	30 g	60 min	17.2 %
Aroma (end of boil)	Willamette	30 g	5 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	---