

## American Pale ale

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **32**
- SRM **5.2**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **29.2 liter(s)**

### Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **28.8 liter(s)**

### Steps

- Temp **69 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **22.1 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **29.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.5 kg (82.1%)	80 %	5
Grain	Monachijski	1 kg (14.9%)	80 %	16
Grain	carmelowy	0.2 kg (3%)	80 %	8

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	30 g	35 min	10.5 %
Boil	Cascade	30 g	15 min	6 %
Whirlpool	Cascade	20 g	0 min	6 %
Dry Hop	Cascade	50 g	5 day(s)	6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	200 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
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Fining	Mech irlandzki	10 g	Boil	15 min
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