

## Pale Ale

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- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **15**
- SRM **5.6**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **49 liter(s)**
- Trub loss **5 %**
- Size with trub loss **53.9 liter(s)**
- Boil time **80 min**
- Evaporation rate **5 %/h**
- Boil size **60.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **45 liter(s)**
- Total mash volume **60 liter(s)**

### Steps

- Temp **67 C**, Time **70 min**

### Mash step by step

- Heat up **45 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Sparge using **30.2 liter(s)** of **76C** water or to achieve **60.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale ale crisp	14 kg (93.3%)	--- %	5.5
Grain	Briess - Munich Malt 10L	1 kg (6.7%)	77 %	25

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bobek	100 g	60 min	3.5 %
Aroma (end of boil)	Cascade	100 g	1 min	6.7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast 1056	Ale	Slant	200 ml	---