

# Pale Ale

- Gravity **13.4 BLG**
- ABV ---
- IBU **66**
- SRM **9.5**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **25 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.2 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.27 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.3 liter(s)**

## Steps

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

## Mash step by step

- Heat up **18.6 liter(s)** of strike water to **75.4C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **30.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	5 kg (87.7%)	81 %	6
Grain	Briess - Carabrown Malt	0.5 kg (8.8%)	79 %	30
Grain	Simpsons - Crystal Dark	0.2 kg (3.5%)	74 %	158

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	100 g	60 min	7 %
Dry Hop	Kent Goldings	100 g	7 day(s)	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	10 g	Danstar

## Extras

Type	Name	Amount	Use for	Time
Other	Irish moss	5 g	Boil	15 min

## Notes

- Golding hop only dry- hopping. First water temperature- 70 C degrees. Sweetness comes from used malt. This beer should be brighter than best bitter and much more bitter. If bitterness overlaps maltiness- it will be to improve.  
*Nov 26, 2015, 3:24 PM*