

# English pale ale

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **24**
- SRM **7.2**
- Style **Extra Special/Strong Bitter (English 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 **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

## Steps

- Temp **69 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **17.1 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **40 min** at **69C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **20.3 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Fawcet	5 kg (87.7%)	90 %	5
Grain	Biscuit Malt	0.5 kg (8.8%)	85 %	50
Grain	Caramel/Crystal Malt	0.1 kg (1.8%)	75 %	120
Grain	Caramel/Dark Crystal Malt	0.1 kg (1.8%)	75 %	210

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	10 g	60 min	5.1 %
Boil	Fuggles	10 g	60 min	6.1 %
Boil	East Kent Goldings	15 g	45 min	5.1 %
Boil	Fuggles	15 g	45 min	6.1 %
Boil	East Kent Goldings	5 g	5 min	5.1 %
Boil	Fuggles	5 g	5 min	6.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale