

## Pale Ale 11 (BA)

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- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **19**
- SRM **4.6**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.2 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **13.2 liter(s)** of strike water to **74.1C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **76C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.8 kg (95%)	85 %	7
Grain	Carahell	0.2 kg (5%)	77 %	26

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	ernest	20 g	60 min	5.1 %
Boil	Willamette	20 g	15 min	5 %
Boil	Willamette	10 g	5 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Gęstwa s-04	Ale	Slant	83 ml	---