

## Pale Ale 11

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **22**
- SRM **9.6**
- Style **Blonde Ale**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **18.3 liter(s)**

### Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.4 liter(s)**
- Total mash volume **12.6 liter(s)**

### Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **9.4 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **18.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	1.5 kg (47.6%)	80 %	8
Grain	Strzegom Wiedeński	1 kg (31.7%)	79 %	10
Grain	Carahell	0.1 kg (3.2%)	77 %	26
Grain	Żytni	0.5 kg (15.9%)	85 %	8
Grain	Strzegom pszenica prażona	0.05 kg (1.6%)	70 %	1000

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	6 g	55 min	10.5 %
Boil	Bramling	20 g	15 min	6 %
Boil	Willamette	20 g	5 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar

### Extras

Type	Name	Amount	Use for	Time
Fining	whirflock	5 g	Boil	15 min