

## #33 Belgian Pale Ale

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **26**
- SRM **6.6**
- Style **Belgian Pale Ale**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **29.3 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.55 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **25 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **19.5 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **60 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **29.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.5 kg (63.6%)	85 %	7
Grain	Strzegom Monachijski typ I	1.5 kg (27.3%)	79 %	16
Grain	Abbey Malt Weyermann	0.25 kg (4.5%)	75 %	45
Grain	Carabelge	0.25 kg (4.5%)	80 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	40 g	60 min	4 %
Boil	Puławski	25 g	15 min	8.9 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM21 Odkrycie sezonu	Ale	Slant	200 ml	Fermentum Mobile