

# Belgian Pale Ale

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **33**
- SRM **6.6**
- Style **Belgian Pale Ale**

## Batch size

- Expected quantity of finished beer **20.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.1 liter(s) / kg**
- Mash size **14.9 liter(s)**
- Total mash volume **19.7 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **14.9 liter(s)** of strike water to **71.1C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **25 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale malt	3 kg (62.5%)	80 %	5
Grain	Monachijski	1.2 kg (25%)	80 %	16
Grain	Abbey Castle	0.31 kg (6.5%)	80 %	45
Grain	Caramunich® typ I	0.05 kg (1%)	73 %	80
Grain	Carabelge	0.18 kg (3.8%)	80 %	30
Grain	Karmelowy Jasny 30EBC	0.06 kg (1.3%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	55 min	7.7 %
Boil	Perle	13 g	20 min	7 %
Boil	Perle	17 g	5 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM26 Belgijskie Pagórki	Ale	Liquid	30 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Water Agent	Chlorek wapnia 33% (10ml)	5 g	Mash	---
Water Agent	Kwas mlekowy	1 g	Mash	---

## Notes

- Woda z kranu, przegotowana.  
z paczki 30g Perle na wadze 15g+21g  
1,5 ml kwasu mlekowego do zacierania, 1 ml do wyładzania  
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