

# Belgijka #5 - Belgijskie Pale Ale - Browar na Wyżynie

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **24**
- SRM **7.7**
- Style **Belgian Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **6.5 %**
- Size with trub loss **23.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **18 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	pilzneński Viking Malt	2 kg (40%)	80 %	4
Grain	wiedeński Viking Malt	1 kg (20%)	79 %	9
Grain	monachijski typ II Viking Malt	1 kg (20%)	78 %	22
Grain	cookie (bursztynowy) Viking Malt	0.5 kg (10%)	72 %	70
Grain	płatki jęczmienne	0.5 kg (10%)	70 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Lubelski (PL) - granulát	35 g	100 min	4.8 %
Whirlpool	Lubelski (PL) - granulát	15 g	15 min	4.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

FM28 Habit opata (1 pokolenie)	Ale	Liquid	1000 ml	Fermentum Mobile
--------------------------------	-----	--------	---------	------------------

### Extras

Type	Name	Amount	Use for	Time
Water Agent	Kwas fosforowy 75% (zacier)	4 g	Mash	60 min
Water Agent	Kwas fosforowy 75% (wystadzanie)	2 g	Mash	60 min
Water Agent	Chlorek wapnia	5 g	Mash	60 min
Water Agent	Gips	4 g	Mash	60 min
Fining	Mech irlandzki	2 g	Boil	15 min
Other	Pożywka dla drożdży Wyeast Brouwland	5 g	Boil	15 min

### Notes

- <https://www.brewersfriend.com/mash-chemistry-and-brewing-water-calculator/?id=3QXXV15>

Ca+2 Mg+2 Na+ Cl- SO4-2 HCO  
67.5 0.0 131.0 89.9 92.6 0.073  
SO42-/Cl- ratio: 1.0 Balanced PH: 5.39  
Jan 7, 2019, 2:37 PM