

## Belgijka #4 - Belgijskie Pale Ale - Browar na Wyżynie

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **24**
- SRM **9.3**
- Style **Belgian Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **6 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **24.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **24.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	pale ale Viking Malt	2.5 kg (55.6%)	79 %	8
Grain	golden ale Viking Malt	1 kg (22.2%)	80 %	11
Grain	monachijski typ II Viking Malt	0.5 kg (11.1%)	78 %	22
Grain	pszeniczny karmelowy Viking Malt	0.25 kg (5.6%)	70 %	100
Grain	karmelowy 100 - Viking Malt	0.25 kg (5.6%)	75 %	100

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Junga (PL) - granulát	15 g	60 min	11 %
Boil	Saaz (CZ) - granulát	5 g	20 min	3.78 %
Aroma (end of boil)	Saaz (CZ) - granulát	30 g	5 min	3.78 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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FM20 Białe Walonki	Wheat	Slant	300 ml	Fermentum Mobile
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### Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	3 g	Boil	15 min
Water Agent	kwask mlekowy 80%	5 g	Mash	70 min
Water Agent	chlorek wapnia	2 g	Mash	70 min
Water Agent	siarczan wapnia	2 g	Mash	70 min
Water Agent	woda demineralizowana	15000 g	Mash	70 min

### Notes

- Profil wody:

Ca+2 Mg+2 Na+ Cl- SO4-2 HCO Alkalinity Residual

94.7 6.5 4.5 42.6 52.8 103.2 109.1 37.7

<https://www.brewersfriend.com/mash-chemistry-and-brewing-water-calculator/?id=511S7P4>  
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