

## BPA

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **27**
- SRM **8**
- Style **Belgian Pale Ale**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **25.2 liter(s)**

### Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **45 min**

### Mash step by step

- Heat up **19.6 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **45 min** at **72C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.9 kg (69.6%)	80 %	5
Grain	Abbey Malt Weyermann	0.7 kg (12.5%)	75 %	45
Grain	Žytni	0.2 kg (3.6%)	80 %	30
Grain	Carabelge	0.8 kg (14.3%)	80 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	15 g	60 min	15.5 %
Boil	Saaz (Czech Republic)	15 g	15 min	4.5 %
Aroma (end of boil)	Styrian Golding	10 g	0 min	3.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
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Fining	Mech irlandzki	2.5 g	Boil	50 min
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## Notes

- FERMENTACJA:  
Fermentacja burzliwa 8 dni w temperaturze około 20 C.  
Fermentacja cicha 20 dni w temperaturze około 20 C.

Pozostawić w butelkach na 30dni.

Mech irlandzki: 2,5 g na 10 litrów brzezki. Odważoną porcję mchu wymieszać w wodzie (na każde 5 g mchu 25 ml wody). Pozostawić na 10-15 minut i dodać do brzezki na ostatnie 10-15 minut gotowania.  
*Mar 14, 2019, 10:17 AM*