

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **29**
- SRM **10.8**
- Style **Belgian Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **20.4 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) US	5 kg (73.5%)	79 %	4
Grain	Monachijski	0.5 kg (7.4%)	80 %	16
Grain	Strzegom Karmel 150	0.5 kg (7.4%)	75 %	150
Grain	Karmelowy Czerwony	0.3 kg (4.4%)	75 %	59
Grain	Płatki pszeniczne	0.5 kg (7.4%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	20 g	60 min	15.5 %
Dry Hop	Cascade PL	30 g	10 day(s)	5.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Liquid	0.3 ml	FM

### Extras

Type	Name	Amount	Use for	Time
Flavor	owoce jałowca macerowane	20 g	Secondary	10 day(s)