

## BPA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **31**
- SRM **5.5**
- Style **Belgian Pale Ale**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.1 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19.1 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (60%)	80 %	5
Grain	Strzegom Wiedeński	1.5 kg (30%)	79 %	10
Grain	Abbey Castle	0.25 kg (5%)	80 %	45
Grain	Strzegom Monachijski typ II	0.25 kg (5%)	79 %	22

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	60 min	11 %
Boil	Saaz (Czech Republic)	25 g	15 min	4.5 %
Boil	Lublin (Lubelski)	17 g	15 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM26 Belgijskie Pagórki	Ale	Liquid	100 ml	Fermentum Mobile