

BPA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **21**
- SRM **4.6**
- Style **Belgian Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19.1 liter(s)**

Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.85 kg (80.6%)	80 %	4
Grain	Strzegom Monachijski typ I	0.367 kg (7.7%)	79 %	16
Grain	Karmelowy Jasny 30EBC	0.3 kg (6.3%)	75 %	30
Grain	Pszeniczny	0.257 kg (5.4%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	26 g	60 min	5.5 %
Boil	Tradition	24 g	7 min	5.5 %
Boil	Saaz (Czech Republic)	20 g	7 min	4.5 %

Yeasts

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