

Bpa

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **23**
- SRM **5.4**
- Style **Belgian Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **18 %/h**
- Boil size **29.9 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **55 C**, Time **0 min**
- Temp **62 C**, Time **10 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **0 min** at **55C**
- Keep mash **10 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **19.9 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.5 kg (90%)	81 %	4
Grain	Caramunich® typ I	0.25 kg (5%)	73 %	80
Grain	Karmelowy Jasny 30EBC	0.25 kg (5%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	45 min	8.5 %
Aroma (end of boil)	Oktawia	100 g	1 min	9.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Trappist High Gravity	Ale	Liquid	100 ml	Wyeast Labs