

Belgian Pale Ale

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **23**
- SRM **8.2**
- Style **Belgian Pale Ale**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **10 %**
- Size with trub loss **44 liter(s)**
- Boil time **65 min**
- Evaporation rate **15 %/h**
- Boil size **51.1 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **35 liter(s)**
- Total mash volume **45 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **35 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **26.1 liter(s)** of **76C** water or to achieve **51.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	7 kg (70%)	80 %	5
Grain	Munich Malt Dark - Best Maltz	2 kg (20%)	74 %	39
Grain	Cara Belge - Weyermann	0.5 kg (5%)	75 %	32
Grain	Cara Red - Weyermann	0.5 kg (5%)	79 %	50

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	First Gold	40 g	60 min	8.4 %
Boil	Golding	40 g	10 min	4.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M27 Belgian Ale	Ale	Dry	17.6 g	Mangrove Jack's