

Felek 5

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **24**
- SRM **3.8**
- 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 **25 %/h**
- Boil size **31.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **22.7 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **15 min** at **76C**
- Sparge using **19 liter(s)** of **76C** water or to achieve **31.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.5 kg (89.1%)	81 %	3.5
Grain	Pszenica niesłodowana	0.2 kg (4%)	75 %	3
Grain	Weyermann - Acidulated Malt	0.1 kg (2%)	80 %	6
Grain	Carabelge	0.25 kg (5%)	80 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	10.9 %
Boil	Cascade PL	50 g	5 min	7.1 %

Extras

Type	Name	Amount	Use for	Time
Fining	WHIRLFLOCK	2 g	Boil	15 min