

BelgianRED_wel

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **17**
- SRM **3.7**
- Style **Belgian Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **0 %**
- Size with trub loss **25 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **30.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **21 liter(s)**

Steps

- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **3 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **71.6C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **3 min** at **78C**
- Sparge using **21.7 liter(s)** of **76C** water or to achieve **30.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.75 kg (62.5%)	79 %	6
Grain	Pilzneński	1 kg (16.7%)	81 %	4
Grain	melanoidynowy 80	0.25 kg (4.2%)	--- %	---
Grain	melanoidynowy 40	1 kg (16.7%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	8 g	70 min	4.5 %
Boil	Challenger	5 g	70 min	7 %
Boil	Brewers Gold	5 g	70 min	7.6 %
Boil	Golding	5 g	70 min	5 %
wrzucone po 10min gotowania :saaz(8) ,challenger(5), brewers gold(5),golding(5)				
Aroma (end of boil)	Saaz (Czech Republic)	7 g	10 min	4.5 %
Aroma (end of boil)	Challenger	5 g	10 min	7 %
Aroma (end of boil)	Brewers Gold	5 g	10 min	7.6 %
Aroma (end of boil)	Golding	5 g	10 min	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis