

BELGIAN PALE ALE V3 #76

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **31**
- SRM **6.7**
- Style **Belgian Pale Ale**

Batch size

- Expected quantity of finished beer **20.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **26.1 liter(s)**

Mash information

- Mash efficiency **81.8 %**
- Liquor-to-grist ratio **4.37 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **24.6 liter(s)**

Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **45 min**
- Temp **75 C**, Time **7 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **7 min** at **75C**
- Sparge using **10.7 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	MEP - pale ale	2.87 kg (62.7%)	82.1 %	5.5
Grain	Viking - monachijski I	1.14 kg (24.9%)	78 %	16
Grain	Weyermann - Abbey	0.34 kg (7.4%)	75 %	45
Grain	Weyermann - Carabelge	0.23 kg (5%)	74 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	10 g	60 min	14.7 %
Aroma (end of boil)	Styrian Golding	50 g	15 min	4 %
Aroma (end of boil)	Simcoe	10 g	5 min	13.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M47 Belgian Abbey	Ale	Slant	130 ml	Mangrove Jack's

Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	2 g	Mash	---
Water Agent	kwas mlekowy [ml]	3.86 g	Mash	---
Water Agent	epsom	1.5 g	Mash	---
Water Agent	chlorek wapnia [ml]	3.44 g	Mash	---
Fining	mech irlandzki	3 g	Boil	5 min