

# BELGIAN PALE ALE V2 #61

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- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **28**
- SRM **6.7**
- Style **Belgian Pale Ale**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **120 min**
- Evaporation rate **9 %/h**
- Boil size **26.6 liter(s)**

## Mash information

- Mash efficiency **87.2 %**
- 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 **78 C**, Time **5 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 **5 min** at **78C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking - pale ale	2.87 kg (62.7%)	79 %	6
Grain	Viking - monachijski I	0.952 kg (20.8%)	78 %	16
Grain	Bestmalz - monachijski I	0.188 kg (4.1%)	80 %	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)	Mosaic	5 g	5 min	12.1 %

## 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	3 g	Mash	---
Water Agent	kwas mlekowy [ml]	4.23 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