

# BELMA - BELGIAN PALE ALE

- Gravity **13.6 BLG**
- ABV ---
- IBU **40**
- SRM **11.6**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.6 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **77 C**, Time **1 min**

## Mash step by step

- Heat up **13.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **77C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2 kg (38.8%)	79 %	6
Grain	Strzegom Monachijski typ II	1.6 kg (31.1%)	79 %	22
Grain	Strzegom Bursztynowy	0.8 kg (15.5%)	70 %	49
Sugar	Cane (Beet) Sugar	0.75 kg (14.6%)	100 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	20 g	60 min	11.2 %
Boil	Belma	30 g	15 min	9.4 %
Dry Hop	Belma	20 g	7 day(s)	9.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M27 Belgian Ale	Ale	Dry	10 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
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Spice	Whole Coriander	15 g	Boil	10 min
Spice	Star Anise	2 g	Boil	10 min