

# Belgus

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **24**
- SRM **3.3**
- Style **Belgian Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.1 liter(s)**

## Steps

- Temp **62 C**, Time **35 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **13.8 liter(s)** of strike water to **68.5C**
- Add grains
- Keep mash **35 min** at **62C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	3.4 kg (79.1%)	80 %	4
Grain	Pszeniczny	0.7 kg (16.3%)	--- %	4
Grain	Weyermann - Carapils	0.2 kg (4.7%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	11 %
Boil	Styrian Golding	30 g	10 min	3.6 %
Aroma (end of boil)	Styrian Golding	20 g	1 min	3.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM27 Artefakty trapistów	Ale	Liquid	1400 ml	Fermentum Mobile