

# Belgian Christmas Ale

- Gravity **22.5 BLG**
- ABV **10.2 %**
- IBU **16**
- SRM **19.1**
- Style **Belgian Specialty Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **29.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **28.7 liter(s)**
- Total mash volume **36.9 liter(s)**

## Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **28.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **8.9 liter(s)** of **76C** water or to achieve **29.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	6 kg (67%)	81 %	5
Grain	Viking Wheat Malt	1 kg (11.2%)	83 %	5
Grain	Weyermann wiedeński	0.5 kg (5.6%)	80 %	8
Sugar	cukier kandyzowany jasny	0.5 kg (5.6%)	100 %	10
Sugar	cukier kandyzowany ciemny	0.25 kg (2.8%)	100 %	10
Grain	Biscuit Malt	0.25 kg (2.8%)	79 %	45
Grain	Caraaroma weyermann	0.25 kg (2.8%)	78 %	400
Grain	Carafa III	0.1 kg (1.1%)	70 %	1034
Grain	Strzegom Czekoladowy jasny	0.1 kg (1.1%)	68 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Tradition	45 g	60 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM25 Klasztorna medytacja	Ale	Liquid	100 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Spice	imbir	30 g	Boil	10 min
Spice	słodka pomarańcza - skórka	20 g	Boil	10 min
Spice	kolendra	10 g	Boil	10 min
Spice	goździki	3 g	Boil	10 min
Spice	cynamon	5 g	Boil	10 min
Spice	gałka muszkatołowa	3 g	Boil	10 min
Spice	kardamon	3 g	Boil	10 min
Spice	anyż	3 g	Boil	10 min
Spice	curcao	10 g	Boil	10 min