

# Czarny belg III

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **29**
- SRM **27.6**
- Style **Belgian Specialty Ale**

## Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **5 %**
- Size with trub loss **36.8 liter(s)**
- Boil time **120 min**
- Evaporation rate **5 %/h**
- Boil size **42.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.3 liter(s)**
- Total mash volume **32.4 liter(s)**

## Steps

- Temp **62 C**, Time **25 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **24.3 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **25 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **26.2 liter(s)** of **76C** water or to achieve **42.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg (40.7%)	81 %	4
Grain	Strzegom Monachijski typ II	1.5 kg (17.4%)	79 %	22
Grain	Briess - Wheat Malt, White	1 kg (11.6%)	85 %	5
Grain	Strzegom Karmel 150	0.5 kg (5.8%)	75 %	150
Grain	Abbey Castle	0.2 kg (2.3%)	80 %	45
Grain	Briess - 2 Row Carapils Malt	0.3 kg (3.5%)	75 %	3
Grain	Special B Malt	0.2 kg (2.3%)	65.2 %	315
Grain	Biscuit Malt	0.2 kg (2.3%)	79 %	45
Grain	Briess - Dark Chocolate Malt	0.5 kg (5.8%)	60 %	900
Sugar	Milk Sugar (Lactose)	0.5 kg (5.8%)	76.1 %	0
Grain	Barwiący obłuszczony	0.2 kg (2.3%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	33 g	60 min	13.5 %
Boil	Golding	25 g	0 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM21 Odkrycie sezonu	Ale	Slant	100 ml	Fermentum Mobile

## Notes

- Sól czekoladowy ciemny dodać przed dojściem do mash-out'u  
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