

# Czarnobrody

- Gravity **25.7 BLG**
- ABV **12.1 %**
- IBU **33**
- SRM **54.5**
- Style **Baltic Porter**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **26.6 liter(s)**

## Steps

- Temp **67 C**, Time **75 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **75 min** at **67C**
- Sparge using **1.9 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	1 kg (15%)	80 %	7
Grain	Briess - Pilsen Malt	1 kg (15%)	80.5 %	2
Grain	Monachijski	1 kg (15%)	80 %	16
Grain	Pszeniczny	1 kg (15%)	85 %	4
Grain	Płatki owsiane	0.4 kg (6%)	60 %	3
Grain	Biscuit Malt	0.5 kg (7.5%)	79 %	45
Grain	Strzegom Karmel 150	0.5 kg (7.5%)	75 %	150
Grain	Strzegom Karmel 300	0.5 kg (7.5%)	70 %	299
Grain	Strzegom Karmel 600	0.25 kg (3.8%)	68 %	601
Grain	Strzegom Czekoladowy jasny	0.25 kg (3.8%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.25 kg (3.8%)	68 %	1200

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Nugget	10 g	60 min	13 %
Boil	Nugget	10 g	30 min	13 %

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Aroma (end of boil)	Enigma (AUS)	30 g	1 min	17.2 %
Whirlpool	Enigma (AUS)	20 g	1 min	17.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	250 ml	Fermentis