

# CZARNOBRODY

- Gravity **23 BLG**
- ABV ---
- IBU **32**
- SRM **40**
- Style **Baltic Porter**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **18.5 %**
- Size with trub loss **21.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.71 liter(s) / kg**
- Mash size **23 liter(s)**
- Total mash volume **31.5 liter(s)**

## Steps

- Temp **61 C**, Time **30 min**
- Temp **73 C**, Time **30 min**
- Temp **79 C**, Time **2 min**

## Mash step by step

- Heat up **23 liter(s)** of strike water to **68.6C**
- Add grains
- Keep mash **30 min** at **61C**
- Keep mash **30 min** at **73C**
- Keep mash **2 min** at **79C**
- Sparge using **8.9 liter(s)** of **76C** water or to achieve **23.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	4 kg (47.1%)	79 %	10
Grain	Monachijski	3 kg (35.3%)	80 %	16
Grain	Strzegom Karmel 30	0.35 kg (4.1%)	75 %	30
Grain	Strzegom Karmel 600	0.4 kg (4.7%)	68 %	601
Grain	Czekoladowy	0.45 kg (5.3%)	60 %	788
Grain	Pilzneński	0.2 kg (2.4%)	81 %	4
Grain	Caraaroma	0.1 kg (1.2%)	78 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	10.5 %
Boil	Lublin (Lubelski)	20 g	20 min	3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast 2000 - Budvar Lager	Lager	Liquid	400 ml	---

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech Irlandzki	4 g	Boil	15 min