

# Czarna Gleba

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **52**
- SRM **36.2**
- Style **American Brown Ale**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **15.3 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **23.9 liter(s)**

## Steps

- Temp **68.5 C**, Time **90 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **19.2 liter(s)** of strike water to **74.5C**
- Add grains
- Keep mash **90 min** at **68.5C**
- Keep mash **15 min** at **72C**
- Sparge using **0.9 liter(s)** of **76C** water or to achieve **15.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Płatki owsiane	0.19 kg (4%)	85 %	3
Grain	Castle Cafe	0.24 kg (5%)	75.5 %	480
Grain	Weyermann - Chocolate Rye	0.24 kg (5%)	20 %	493
Grain	Weyermann - Chocolate Wheat	0.24 kg (5%)	74 %	788
Grain	Biscuit Malt	0.48 kg (10%)	79 %	45
Grain	Pszeniczny	0.48 kg (10%)	85 %	4
Grain	Strzegom Monachijski typ I	0.81 kg (16.9%)	79 %	16
Grain	Casle Malting Whisky Nature	2.11 kg (44.1%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	ctz	20 g	60 min	14.7 %
Boil	ctz	10 g	15 min	14.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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FM13 Irlandzkie Ciemności	Ale	Liquid	90 ml	Fermentum Mobile
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