

# Czrnuszek

- Gravity **22.2 BLG**
- ABV ---
- IBU **20**
- SRM **46.9**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **15.8 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **80C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **9.3 liter(s)** of **76C** water or to achieve **14.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Colorado pale base	2.5 kg (46.6%)	79 %	5
Grain	Strzegom Wiedeński	1 kg (18.6%)	79 %	10
Grain	Weyermann - Pilsner Malt	1 kg (18.6%)	81 %	5
Grain	viking malt honing/crystal10l	0.17 kg (3.2%)	78.5 %	20
Grain	Amber Malt	0.15 kg (2.8%)	75 %	75
Grain	Carafa special typ 3	0.15 kg (2.8%)	65 %	1400
Grain	Carafa special typ2	0.15 kg (2.8%)	65 %	1150
Sugar	Cukier brazwy	0.1 kg (1.9%)	--- %	---
Grain	Black specjal	0.15 kg (2.8%)	30 %	1400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Apollo	5 g	60 min	17 %
Boil	Apollo	5 g	30 min	17 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Dry	5 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Spice	Wanilia	3 g	Secondary	7 day(s)