

# 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) |