

# Czeskie czarne

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- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **24**
- SRM **25.1**
- Style **Schwarzbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **19 liter(s)**

## Steps

- Temp **68 C**, Time **90 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **76.6C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount     | Yield | EBC |
|-------|-----------------------------|------------|-------|-----|
| Grain | Strzegom Monachijski typ II | 2 kg (40%) | 79 %  | 22  |
| Grain | Strzegom Wiedeński          | 2 kg (40%) | 79 %  | 10  |
| Grain | Strzegom Czekoladowy jasny  | 1 kg (20%) | 68 %  | 400 |

## Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Magnum | 15 g   | 60 min | 13.5 %     |
| Boil    | Kazbek | 15 g   | 5 min  | 4.6 %      |

## Yeasts

| Name             | Type  | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry  | 11.5 g | Fermentis  |