

Czeskie czarne

- 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 |