

Český ležák tmavý MOJA WERSJA

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **21**
- SRM **20**
- Style **Schwarzbier**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **85 min**
- Evaporation rate **10 %/h**
- Boil size **28.9 liter(s)**

Mash information

- Mash efficiency **87 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **22.7 liter(s)**

Steps

- Temp **51 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **17.3 liter(s)** of strike water to **55.8C**
- Add grains
- Keep mash **10 min** at **51C**
- Keep mash **30 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|---------------|-------|------|
| Grain | Pilzneński | 2.7 kg (50%) | 81 % | 4 |
| Grain | Monachijski | 2 kg (37%) | 80 % | 16 |
| Grain | Karmelowy żytni Strzegom | 0.5 kg (9.3%) | 75 % | 150 |
| Grain | Weyermann - Carafa II | 0.2 kg (3.7%) | 70 % | 1150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil | Premiant | 30 g | 60 min | 6.6 % |
| Boil | Saaz (Czech Republic) | 15 g | 15 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------------------|-------|------|--------|-----------------|
| Mangrove Jack's M84 Bohemian Lager | Lager | Dry | 10 g | Mangrove Jack's |