

# Český ležák tmavý

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **27**
- SRM **28.5**
- Style **Schwarzbier**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 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 **16.8 liter(s)**
- Total mash volume **22.1 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 **16.8 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 **17.4 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński        | 2.5 kg (47.6%) | 80 %  | 4   |
| Grain | Strzegom Monachijski typ I | 2 kg (38.1%)   | 79 %  | 16  |
| Grain | Strzegom Karmel 600        | 0.5 kg (9.5%)  | 68 %  | 601 |
| Grain | Black (Patent) Malt        | 0.25 kg (4.8%) | 55 %  | 985 |

## Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Premiant              | 30 g   | 60 min | 6.6 %      |
| Boil    | Cascade PL            | 10 g   | 45 min | 5.5 %      |
| Boil    | Saaz (Czech Republic) | 15 g   | 15 min | 4 %        |

## Yeasts

| Name             | Type  | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry  | 22 g   | Fermentis  |

## Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 5 g    | Boil    | 10 min |