

#Ciemne czeskie

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **18**
- SRM **24.4**
- Style **Schwarzbier**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **26.1 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|---------------|-------|-----|
| Grain | Pilznieński | 4 kg (69%) | 81 % | 4 |
| Grain | Karmelowy Czerwony | 1 kg (17.2%) | 75 % | 59 |
| Grain | Czekoladowy | 0.3 kg (5.2%) | 60 % | 788 |
| Grain | Caraaroma | 0.5 kg (8.6%) | 78 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 25 g | 60 min | 4 % |
| Boil | Magnum | 15 g | 10 min | 13.5 % |
| Aroma (end of boil) | Cascade PL | 20 g | 5 min | 5.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------|-------|------|--------|------------|
| w34/75 | Lager | Dry | 23 g | --- |