

czekoladowy porter

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **23.7**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.9 liter(s)**
- Total mash volume **19.8 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.3 kg (66.7%) | 80 % | 5 |
| Grain | Fawcett - Brown | 0.5 kg (10.1%) | 72 % | 180 |
| Grain | Strzegom Monachijski typ I | 0.5 kg (10.1%) | 79 % | 16 |
| Grain | Caramel/Crystal Malt - 120L | 0.4 kg (8.1%) | 72 % | 236 |
| Grain | Weyermann - Chocolate Wheat | 0.25 kg (5.1%) | 74 % | 788 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Fuggles | 40 g | 60 min | 4.4 % |
| Aroma (end of boil) | Fuggles | 25 g | 10 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|---------|------------------|
| FM12 W szkocką kratę | Ale | Liquid | 1300 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------------|--------|---------|--------|
| Flavor | ziarno kakaowca | 200 g | Boil | 10 min |