

Czekoladka

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **23**
- SRM **24.1**
- 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 **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (72.7%) | 80 % | 5 |
| Grain | Fawcett - Brown | 1 kg (18.2%) | 72 % | 180 |
| Grain | Castle Malting - Cara Crystal | 0.3 kg (5.5%) | 80 % | 150 |
| Grain | Czekoladowy | 0.1 kg (1.8%) | 60 % | 900 |
| Grain | Carafa II | 0.1 kg (1.8%) | 70 % | 812 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Fuggles | 30 g | 60 min | 4.5 % |
| Boil | Fuggles | 30 g | 20 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Flavor | Łuska kakaowca | 100 g | Mash | 60 min |

| | | | | |
|--------|---|------|-----------|----------|
| Flavor | Ziarno kakaowca | 50 g | Boil | 15 min |
| Flavor | Ziarno kakaowca macerowane w whisky | 50 g | Secondary | 7 day(s) |