

Pale Ale + czekoladowy

- Gravity **8.8 BLG**
- ABV **3.4 %**
- IBU **25**
- SRM **11.4**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.5 liter(s)**
- Total mash volume **20.6 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **27.7 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 5 kg (97.1%) | 80 % | 5 |
| Grain | Strzegom Czekoladowy 1200 | 0.15 kg (2.9%) | 68 % | 1202 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Summit | 10 g | 50 min | 14.3 % |
| Boil | Summit | 10 g | 30 min | 14.3 % |
| Boil | Summit | 10 g | 10 min | 14.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale | Dry | 11.5 g | --- |