

Pale Ale + Monachijski + Pilzneński+Czekol+Barw

- Gravity **7.3 BLG**
- ABV **2.8 %**
- IBU **37**
- SRM **17.9**

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 **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

Steps

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

Mash step by step

- Heat up **12.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **29.4 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (46.5%)	80 %	5
Grain	Strzegom Pilzneński	1 kg (23.3%)	80 %	4
Grain	Strzegom Monachijski typ I	1 kg (23.3%)	79 %	16
Grain	Strzegom Czekoladowy 1200	0.15 kg (3.5%)	68 %	1202
Grain	Strzegom Barwiący	0.15 kg (3.5%)	68 %	1300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Merkur	30 g	40 min	13 %
Boil	Sovereign	30 g	20 min	4.1 %

Yeasts

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