

Polish,Czech,American Pale Ale

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **42**
- SRM **4.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **13.8 liter(s)**

Mash information

- Mash efficiency **95 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.1 liter(s)**
- Total mash volume **9.4 liter(s)**

Steps

- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **100 C**, Time **60 min**

Mash step by step

- Heat up **7.1 liter(s)** of strike water to **72.4C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **60 min** at **100C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	1 kg (42.6%)	79 %	6
Grain	Pilzniejszy	1 kg (42.6%)	81 %	4
Grain	Strzegom Karmel 30	0.25 kg (10.6%)	75 %	30
Grain	Oats, Flaked	0.1 kg (4.3%)	80 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	25 g	60 min	4 %
Boil	Lublin (Lubelski)	25 g	40 min	4 %
Boil	Saaz (Czech Republic)	25 g	5 min	4.5 %
Aroma (end of boil)	Mosaic	50 g	0 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale