

#69 Polish Pale Ale

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **33**
- SRM **4.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10.8 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **14 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **4.1 liter(s) / kg**
- Mash size **10.9 liter(s)**
- Total mash volume **13.6 liter(s)**

Steps

- Temp **67 C**, Time **35 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **2 min**

Mash step by step

- Heat up **10.9 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **35 min** at **67C**
- Keep mash **30 min** at **72C**
- Keep mash **2 min** at **77C**
- Sparge using **5.8 liter(s)** of **76C** water or to achieve **14 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1.52 kg (56.9%)	80 %	4
Grain	Viking Pale Ale malt	0.38 kg (14.2%)	80 %	5
Grain	Strzegom Pszeniczny	0.5 kg (18.7%)	81 %	6
Grain	Abbey Malt Weyermann	0.14 kg (5.2%)	75 %	45
Grain	Płatki owsiane	0.13 kg (4.9%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	7 g	55 min	9.5 %
Aroma (end of boil)	Lublin (Lubelski)	25 g	5 min	4.8 %
Whirlpool	Lublin (Lubelski)	15 g	15 min	4.8 %
Whirlpool	Chinook PL	10 g	15 min	9.1 %
Whirlpool	lunga	15 g	15 min	9.5 %
Dry Hop	Lublin (Lubelski)	45 g	3 day(s)	4.8 %
Dry Hop	lunga	25 g	3 day(s)	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	70 ml	---

Extras

Type	Name	Amount	Use for	Time
Water Agent	Whirlfloc	1.25 g	Boil	12 min