

Polish Pale Ale

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **39**
- SRM **4.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **26.2 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **70 C**, Time **20 min**
- Temp **77 C**, Time **3 min**

Mash step by step

- Heat up **14.4 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **70C**
- Keep mash **3 min** at **77C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.2 kg (87.5%)	79 %	6
Grain	Płatki owsiane	0.2 kg (4.2%)	85 %	3
Grain	Strzegom Monachijski typ I	0.4 kg (8.3%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	18 g	60 min	8.7 %
Boil	Puławski	12 g	60 min	8.9 %
Boil	Oktawia	20 g	15 min	8.9 %
Aroma (end of boil)	Lublin (Lubelski)	15 g	2 min	3.9 %
Aroma (end of boil)	Puławski	20 g	2 min	8.9 %
Dry Hop	Oktawia	30 g	3 day(s)	8.9 %
Dry Hop	Puławski	30 g	3 day(s)	8.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale K-97	Ale	Dry	11.5 g	Fermentis