Polish ale

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **16**
- SRM **7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **12.5 liter(s)**
- Trub loss **4 %**
- Size with trub loss **13 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **15.7 liter(s)**

Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **3.45 liter(s) / kg**
- Mash size **9.1 liter(s)**
- Total mash volume **11.8 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **9.1 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **9.3 liter(s)** of **76C** water or to achieve **15.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	1 kg *(37.7%)*	79 %	16
Grain	Strzegom Wiedeński	1 kg *(37.7%)*	79 %	10
Grain	Strzegom Pszeniczny Ciemny	0.6 kg *(22.6%)*	81 %	18
Grain	Weyermann - Acidulated Malt	0.05 kg *(1.9%)*	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	9 g	60 min	3.7 %
Boil	Lublin (Lubelski)	11 g	60 min	2.8 %
Boil	Lublin (Lubelski)	14 g	15 min	2.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	60 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	2 g	Boil	60 min
Other	Witamina C	2 g	Bottling	---
Fining	Mech irlandzki	5 g	Boil	15 min