

PoPeł

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **69**
- SRM **6.9**
- Style **American IPA**

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 **36.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.9 liter(s)**
- Total mash volume **33.2 liter(s)**

Steps

- Temp **69 C**, Time **60 min**
- Temp **75 C**, Time **1 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **24.9 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **75C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **36.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (47.1%)	80 %	4
Grain	Strzegom Pale Ale	4 kg (47.1%)	79 %	6
Grain	Strzegom Karmel 150	0.3 kg (3.5%)	75 %	150
Sugar	Candi Sugar, Clear	0.2 kg (2.4%)	78.3 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	50 g	60 min	9.5 %
Aroma (end of boil)	Citra	10 g	10 min	12 %
Dry Hop	Centennial	25 g	9 day(s)	10.5 %
Boil	Centennial	25 g	60 min	10.5 %
Boil	Magnum	15 g	60 min	13.5 %
Dry Hop	Amarillo	20 g	9 day(s)	9.5 %
Dry Hop	Citra	10 g	9 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Wyeast - American Ale	Ale	Liquid	125 ml	Wyeast Labs
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Extras

Type	Name	Amount	Use for	Time
Flavor	syrop z pędów sosny	1500 g	Secondary	9 day(s)