

APA z resztek

- Gravity **12.1 BLG**
- ABV ---
- IBU **31**
- SRM ---
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **14 %/h**
- Boil size **27.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **19.7 liter(s)**

Steps

- Temp **69 C**, Time **300 min**

Mash step by step

- Heat up **15.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **300 min** at **69C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **27.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.43 kg (55.5%)	--- %	0
Grain	Strzegom Pszeniczny	1.95 kg (44.5%)	--- %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Willamette	10 g	60 min	5.5 %
Boil	Citra	5 g	45 min	13.5 %
Boil	Centennial	5 g	20 min	9.4 %
Boil	Centennial	19 g	10 min	9.4 %
Boil	Summit	16 g	5 min	16.2 %
Boil	Summit	10 g	0 min	16.2 %
Boil	Citra	7 g	0 min	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Slant	666 ml	---