

APA 03-10

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **35**
- SRM **6.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzński	0.5 kg (8.3%)	81 %	4
Grain	Briess - Pale Ale Malt	4 kg (66.7%)	80 %	7
Grain	Pszeniczny	0.3 kg (5%)	85 %	4
Grain	Strzegom Wiedeński	0.5 kg (8.3%)	79 %	10
Grain	Jęczmień niesłodowany	0.2 kg (3.3%)	75 %	2
Grain	Strzegom Karmel 30	0.5 kg (8.3%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	16.1 %
Boil	citra	20 g	10 min	12.7 %
Boil	Mosaic	30 g	5 min	11.4 %
Boil	Cascade	30 g	5 min	4 %
Dry Hop	Columbus/Tomahawk/Zeus	30 g	---	15.5 %
Dry Hop	Citra	30 g	---	12 %
Dry Hop	Cascade	30 g	---	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
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us-05	Ale	Dry	10 g	---
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