APA Amarillo

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **62**
- SRM **3.3**
- 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 **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **23.8 liter(s)**

Steps

- Temp **69 C**, Time **60 min**

Mash step by step

- Heat up **18.8 liter(s)** of strike water to **75.5C**
- Add grains
- Keep mash **60 min** at **69C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg *(80.8%)*	81 %	4
Grain	Pszeniczny	0.55 kg *(11.1%)*	85 %	4
Grain	Płatki owsiane	0.4 kg *(8.1%)*	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	15 g	60 min	13 %
Boil	Amarillo	15 g	30 min	9.5 %
Boil	Cashmere	15 g	30 min	9 %
Aroma (end of boil)	Amarillo	30 g	10 min	9.5 %
Aroma (end of boil)	Cashmere	30 g	10 min	9 %
Whirlpool	Chinook	15 g	0 min	13 %
Whirlpool	Amarillo	15 g	0 min	9.5 %
Dry Hop	Amarillo	30 g	3 day(s)	9.5 %
Dry Hop	Cashmere	30 g	3 day(s)	9 %
Whirlpool	Cashmere	15 g	0 min	9 %

Yeasts

Name	Type	Form	Amount	Laboratory

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Safale US-04	Ale	Dry	11 g	Fermentis

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