

Chocolate APA

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **34**
- SRM **11.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (80%)	81 %	4
Grain	Pszeniczny	0.8 kg (16%)	85 %	4
Grain	Briess - Chocolate Malt	0.2 kg (4%)	60 %	690

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	10 g	30 min	8.9 %
Boil	Mosaic	10 g	30 min	11.8 %
Boil	Centennial	10 g	15 min	9.7 %
Boil	Mosaic	10 g	15 min	11.8 %
Boil	Centennial	10 g	5 min	9.7 %
Boil	Mosaic	10 g	5 min	11.8 %
Boil	Puławski	10 g	5 min	8.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-05	Ale	Slant	30 ml	fermentis