

APA 30

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **23**
- SRM **6.9**
- 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 **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **5 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **72C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	4.5 kg (86.5%)	80 %	8
Grain	Pilzneński	0.5 kg (9.6%)	81 %	4
Grain	Strzegom Karmel 150	0.2 kg (3.8%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	15 g	60 min	9.5 %
Boil	Cascade	20 g	25 min	6 %
Whirlpool	Amarillo	15 g	60 min	9.5 %
Whirlpool	Cascade	30 g	60 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis