

# APA Amarillo Cascade

- Gravity **11.1 BLG**
- ABV ---
- IBU **33**
- SRM **4.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg (87.5%)	81 %	4
Grain	Pszeniczny	0.25 kg (6.3%)	85 %	4
Grain	Strzegom Karmel 30	0.25 kg (6.3%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	15 g	60 min	9.5 %
Boil	Amarillo	10 g	30 min	9.5 %
Boil	Cascade	15 g	15 min	6 %
Aroma (end of boil)	Cascade	20 g	0 min	6 %
Aroma (end of boil)	Amarillo	10 g	0 min	9.5 %
Dry Hop	Cascade	15 g	5 day(s)	6 %
Dry Hop	Amarillo	15 g	5 day(s)	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis