

# APA columbus safale 97

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **34**
- SRM **6.6**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **2 %**
- Size with trub loss **14.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **16.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **13.3 liter(s)**
- Total mash volume **16.6 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **76 C**, Time **15 min**

## Mash step by step

- Heat up **13.3 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **76C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **16.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.37 kg (71.3%)	79 %	6
Grain	BESTMALZ - Best Pilsen	0.16 kg (4.8%)	80.5 %	4
Grain	Strzegom Bursztynowy/cookie	0.4 kg (11.9%)	70 %	49
Grain	Strzegom Wiedeński	0.4 kg (11.9%)	79 %	10

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	7.9 g	60 min	15.5 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	15.79 g	10 min	15.5 %
Dry Hop	Columbus/Tomahawk/Zeus	55.26 g	5 day(s)	15.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale K-97	Ale	Slant	157.9 ml	Fermentis