

## APA columbus safale 97

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **34**
- SRM **6.5**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **2 %**
- Size with trub loss **19.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **21.2 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **21 liter(s)**

### Steps

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

### Mash step by step

- Heat up **16.8 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **76C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **21.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (71.4%)	79 %	6
Grain	BESTMALZ - Best Pilsen	0.2 kg (4.8%)	80.5 %	4
Grain	Strzegom Bursztynowy/cookie	0.5 kg (11.9%)	70 %	49
Grain	Strzegom Wiedeński	0.5 kg (11.9%)	79 %	10

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	20 g	10 min	15.5 %
Dry Hop	Columbus/Tomahawk/Zeus	70 g	5 day(s)	15.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale K-97	Ale	Slant	200 ml	Fermentis