

# #1 Centennial APA

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- Gravity **12.7 BLG**
- ABV ---
- IBU **37**
- SRM **6.2**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **65 min**
- Evaporation rate **8 %/h**
- Boil size **28.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **21.3 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **16 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **77C**
- Sparge using **18 liter(s)** of **76C** water or to achieve **28.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (93.8%)	79 %	6
Grain	Strzegom Karmel 30	0.33 kg (6.2%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	20 g	60 min	9.4 %
Boil	Centennial	20 g	30 min	9.4 %
Boil	Centennial	20 g	5 min	9.4 %
Whirlpool	Centennial	40 g	50 min	9.4 %
Dry Hop	Centennial	100 g	3 day(s)	9.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	150 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	4 g	Mash	60 min

Water Agent	Kwas mlekowy 50 %	6 g	Mash	50 min
Water Agent	Chlorek wapnia	3 g	Mash	60 min