

# Sunny State APA

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **37**
- SRM **3.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **5 %/h**
- Boil size **24.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

## Steps

- Temp **55 C**, Time **15 min**
- Temp **70 C**, Time **60 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **15 min** at **55C**
- Keep mash **60 min** at **70C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **24.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Maris Otter	4 kg (80%)	79 %	4
Grain	Weyermann pszeniczny jasny	1 kg (20%)	80 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	5 g	60 min	7.1 %
Boil	Cascade	5 g	60 min	6.9 %
Boil	Centennial	5 g	60 min	9.7 %
Boil	Citra	5 g	60 min	13.8 %
Boil	Amarillo	5 g	30 min	7.1 %
Boil	Cascade	5 g	30 min	6.9 %
Boil	Centennial	5 g	30 min	9.7 %
Boil	Citra	5 g	30 min	13.8 %
Aroma (end of boil)	Cascade	5 g	2 min	6.9 %
Aroma (end of boil)	Amarillo	5 g	2 min	7.1 %
Dry Hop	Amarillo	15 g	---	7.1 %
Dry Hop	Cascade	15 g	---	6.9 %

Dry Hop	Centennial	20 g	---	9.7 %
Dry Hop	Citra	20 g	---	13.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale