

# Single Hop Apa Ausrtalian Cascade 49

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **33**
- SRM **6**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **28.8 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **22.4 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (78.2%)	80 %	5
Grain	Pszeniczny	0.44 kg (6.9%)	85 %	4
Grain	Słód Caramunich Typ II Weyermann	0.3 kg (4.7%)	73 %	120
Grain	zakwaszający	0.15 kg (2.3%)	--- %	---
Grain	Płatki owsiane	0.5 kg (7.8%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	20 g	60 min	7.2 %
Boil	Cascade	20 g	30 min	7.2 %
Boil	Cascade	30 g	15 min	7.2 %
Boil	Cascade	30 g	5 min	7.2 %
Dry Hop	Cascade	100 g	6 day(s)	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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FM52 Amerykański Sen	Ale	Liquid	200 ml	Fermentum Mobile
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