

# APA TWO HOPS 38

- Gravity **13.6 BLG**
- ABV ---
- IBU **45**
- SRM **4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **4 %**
- Size with trub loss **27 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.5 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.8 liter(s)**
- Total mash volume **30.6 liter(s)**

## Steps

- Temp **65 C**, Time **80 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **23.8 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **80 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **32.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pilsen Malt	5 kg (73.5%)	80.5 %	4
Grain	Pszeniczny	0.5 kg (7.4%)	85 %	4
Grain	Płatki owsiane	0.8 kg (11.8%)	85 %	3
Grain	caramunich	0.5 kg (7.4%)	72 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	10 g	60 min	13.5 %
Boil	Cascade	10 g	60 min	6 %
Boil	Citra	10 g	30 min	13.5 %
Boil	Cascade	10 g	30 min	5.9 %
Boil	Citra	15 g	15 min	13.5 %
Boil	Cascade	15 g	15 min	5.9 %
Boil	Citra	20 g	1 min	13.5 %
Boil	Cascade	20 g	1 min	6 %
Dry Hop	Cascade	45 g	7 day(s)	6 %
Dry Hop	Citra	45 g	7 day(s)	13.5 %