

# Apa

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **42**
- SRM **4.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.7 liter(s)**

## Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.5 liter(s)**
- Total mash volume **27.6 liter(s)**

## Steps

- Temp **68 C**, Time **80 min**

## Mash step by step

- Heat up **21.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **80 min** at **68C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **32.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	2.34 kg (38.1%)	80 %	7
Grain	Pszeniczny	0.64 kg (10.4%)	85 %	4
Grain	Słód owsiany Fawcett	0.37 kg (6%)	61 %	5
Grain	Carahell	0.52 kg (8.5%)	77 %	26
Grain	Pilzneński	0.9 kg (14.7%)	81 %	4
Grain	Oats, Flaked	0.87 kg (14.2%)	80 %	2
Grain	Wheat, Flaked	0.5 kg (8.1%)	77 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Oktawia	20 g	60 min	9 %
Aroma (end of boil)	Falconer's flight	50 g	5 min	10.3 %
Whirlpool	Simcoe	50 g	20 min	14.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc	5 g	Boil	8 min