

# APA

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **37**
- SRM **4.9**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

## Mash step by step

- Heat up **12.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **75C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4 kg (95.2%)	80 %	7
Grain	Caramel/Crystal Malt - 20L	0.2 kg (4.8%)	75 %	39

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Horizon	20 g	60 min	14 %
Aroma (end of boil)	Ahtanum	10 g	5 min	5 %
Aroma (end of boil)	Amarillo	10 g	5 min	9.5 %
Dry Hop	Equinox	20 g	3 day(s)	13.1 %
Dry Hop	Columbus/Tomahawk/Zeus	20 g	3 day(s)	15.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	20 g	Danstar

## Notes

- Piwo o raczej delikatnym aromacie. Bardzo pijalne. Następnym razem zwiększyć ilość słodów i chmieli na zimno.  
*Feb 25, 2018, 11:38 AM*