

# Stary Gaj #1 - APA - Browar na Wyżynie

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **36**
- SRM **7.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **1 %/h**
- Boil size **23.2 liter(s)**

## Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

## Steps

- Temp **67 C**, Time **80 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **80 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **23.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Liquid Extract	Bruntal	1.7 kg (36.2%)	75 %	25
Grain	Viking Pale Ale malt	2.5 kg (53.2%)	75 %	6
Grain	Viking Caramel malt 30	0.5 kg (10.6%)	75 %	35

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	25 min	15 %
Boil	Cascade	10 g	25 min	7.7 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	25 g	7 min	15 %
Aroma (end of boil)	Cascade	25 g	7 min	7.7 %
Whirlpool	Columbus/Tomahawk/Zeus	15 g	0 min	15 %
Whirlpool	Cascade	15 g	0 min	7.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.2 g	Fermentis

## Notes

- Wyszło dobre piwko. Na przyszłość trzeba uskutecznić chmienie na zimno.  
*Mar 26, 2017, 10:37 PM*