

# 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*