

# APA

- Gravity **14.1 BLG**
- ABV ---
- IBU **47**
- SRM **6.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **10 %**
- Size with trub loss **14.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **16.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.9 liter(s)**
- Total mash volume **13.2 liter(s)**

## Steps

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

## Mash step by step

- Heat up **9.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **16.8 liter(s)** of wort

## Fermentables

| Type  | Name               | Amount         | Yield | EBC |
|-------|--------------------|----------------|-------|-----|
| Grain | Pilzneński         | 2 kg (60.6%)   | 81 %  | 4   |
| Grain | Monachijski        | 0.25 kg (7.6%) | 80 %  | 16  |
| Grain | Strzegom Wiedeński | 0.25 kg (7.6%) | 79 %  | 10  |
| Grain | Strzegom Karmel 30 | 0.3 kg (9.1%)  | 75 %  | 30  |
| Grain | Barley, Flaked     | 0.2 kg (6.1%)  | 70 %  | 4   |
| Grain | Pszoniczny         | 0.3 kg (9.1%)  | 85 %  | 4   |

## Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Citra    | 10 g   | 60 min   | 12 %       |
| Boil                | Cascade  | 5 g    | 30 min   | 6 %        |
| Boil                | Citra    | 5 g    | 30 min   | 12 %       |
| Aroma (end of boil) | Citra    | 5 g    | 15 min   | 12 %       |
| Aroma (end of boil) | Amarillo | 5 g    | 15 min   | 9.5 %      |
| Whirlpool           | Cascade  | 10 g   | 0 min    | 6 %        |
| Dry Hop             | Amarillo | 10 g   | 7 day(s) | 9.5 %      |
| Dry Hop             | Cascade  | 10 g   | 7 day(s) | 6 %        |
| Boil                | Amarillo | 5 g    | 30 min   | 9.5 %      |

## Yeasts

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| <b>Name</b>  | <b>Type</b> | <b>Form</b> | <b>Amount</b> | <b>Laboratory</b> |
|--------------|-------------|-------------|---------------|-------------------|
| Safale US-05 | Ale         | Dry         | 6 g           | Fermentis         |

### **Extras**

| <b>Type</b> | <b>Name</b>     | <b>Amount</b> | <b>Use for</b> | <b>Time</b> |
|-------------|-----------------|---------------|----------------|-------------|
| Fining      | mech irlandzki  | 3 g           | Boil           | 60 min      |
| Water Agent | gips piwowarski | 2 g           | Mash           | 60 min      |