

# APA Sabro

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **40**
- SRM **4.5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **23.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **21 liter(s)**

## Steps

- Temp **52 C**, Time **25 min**
- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **16 liter(s)** of strike water to **57C**
- Add grains
- Keep mash **25 min** at **52C**
- Keep mash **60 min** at **67C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 2 kg (40%)    | 80 %  | 6   |
| Grain | Pszeniczny           | 1 kg (20%)    | 85 %  | 4   |
| Grain | Żytni                | 0.75 kg (15%) | 85 %  | 6   |
| Grain | Słód owsiany Fawcett | 0.75 kg (15%) | 61 %  | 5   |
| Grain | Płatki owsiane       | 0.5 kg (10%)  | 85 %  | 3   |

## Hops

| Use for             | Name    | Amount | Time     | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil                | Warrior | 15 g   | 50 min   | 15.5 %     |
| Aroma (end of boil) | Sabro   | 15 g   | 5 min    | 15.8 %     |
| Whirlpool           | Sabro   | 20 g   | 15 min   | 15.8 %     |
| Dry Hop             | Sabro   | 30 g   | 5 day(s) | 15.8 %     |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US-05 | Ale  | Dry  | 11 g   | Fermentis  |