

# Polska APA

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **46**
- SRM **7.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **0 %**
- Size with trub loss **20 liter(s)**
- Boil time **60 min**
- Evaporation rate **1 %/h**
- Boil size **20.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **4 liter(s)**
- Total mash volume **5.6 liter(s)**

## Steps

- Temp **67 C**, Time **45 min**

## Mash step by step

- Heat up **4 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **45 min** at **67C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **20.2 liter(s)** of wort

## Fermentables

| Type           | Name                           | Amount         | Yield | EBC |
|----------------|--------------------------------|----------------|-------|-----|
| Liquid Extract | Bruntal ekstrakt słodowy jasny | 1.7 kg (51.5%) | 81 %  | 26  |
| Grain          | Viking Pale Ale malt           | 1 kg (30.3%)   | 80 %  | 5   |
| Grain          | Strzegom Monachijski typ I     | 0.2 kg (6.1%)  | 79 %  | 16  |
| Grain          | Płatki owsiane                 | 0.3 kg (9.1%)  | 60 %  | 3   |
| Grain          | Biscuit Malt                   | 0.1 kg (3%)    | 79 %  | 45  |

## Hops

| Use for             | Name | Amount | Time      | Alpha acid |
|---------------------|------|--------|-----------|------------|
| Boil                | Zula | 20 g   | 30 min    | 11 %       |
| Aroma (end of boil) | Zula | 80 g   | 5 min     | 11 %       |
| Dry Hop             | Zula | 100 g  | 10 day(s) | 11 %       |

## Yeasts

| Name | Type | Form  | Amount | Laboratory |
|------|------|-------|--------|------------|
| s04  | Ale  | Slant | 200 ml | ---        |

## Extras

| Type  | Name               | Amount | Use for | Time  |
|-------|--------------------|--------|---------|-------|
| Other | pożywka do drożdzy | 5 g    | Boil    | 1 min |