

# apa owsiana

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **41**
- SRM **4.5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **1 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **77C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount        | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 5 kg (83.3%)  | 80 %  | 4   |
| Grain | Słód Honig Viking   | 0.5 kg (8.3%) | 80 %  | 12  |
| Grain | Żytni               | 0.5 kg (8.3%) | 85 %  | 8   |

## Hops

| Use for             | Name       | Amount | Time     | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil                | Magnum     | 30 g   | 50 min   | 13 %       |
| Aroma (end of boil) | Cascade PL | 50 g   | 5 min    | 5.2 %      |
| Dry Hop             | Galena     | 20 g   | 4 day(s) | 12 %       |
| Dry Hop             | Cascade PL | 10 g   | 4 day(s) | 5.2 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 0.5 g  | Fermentis  |

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|             |                |       |      |        |
|-------------|----------------|-------|------|--------|
| Water Agent | płatki owsiane | 300 g | Mash | 70 min |
|-------------|----------------|-------|------|--------|