

# Apa

- Gravity **9.3 BLG**
- ABV **3.6 %**
- IBU **30**
- SRM **5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **16.7 liter(s)**

## Steps

- Temp **67 C**, Time **75 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **13 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **75 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount         | Yield | EBC |
|-------|----------------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt             | 3.2 kg (86.5%) | 80 %  | 5   |
| Grain | Płatki orkiszowe                 | 0.2 kg (5.4%)  | 80 %  | 4   |
| Grain | Słód Caramunich Typ II Weyermann | 0.15 kg (4.1%) | 73 %  | 120 |
| Grain | Caramel/Crystal Malt - 10L       | 0.15 kg (4.1%) | 75 %  | 20  |

## Hops

| Use for             | Name    | Amount | Time     | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil                | Marynka | 15 g   | 60 min   | 10 %       |
| Aroma (end of boil) | Cascade | 20 g   | 30 min   | 6 %        |
| Aroma (end of boil) | Cascade | 20 g   | 1 min    | 6 %        |
| Dry Hop             | Cascade | 80 g   | 7 day(s) | 6 %        |
| Dry Hop             | Simcoe  | 50 g   | 7 day(s) | 13.2 %     |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |

## Extras

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

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 10 g   | Boil    | 20 min |