

# Piwowar - Micro IPA

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **21**
- SRM **3.2**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.1 liter(s)**
- Boil time **40 min**
- Evaporation rate **10 %/h**
- Boil size **34 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.1 liter(s)**
- Total mash volume **20.2 liter(s)**

## Steps

- Temp **52 C**, Time **5 min**
- Temp **67 C**, Time **15 min**
- Temp **72 C**, Time **50 min**

## Mash step by step

- Heat up **15.1 liter(s)** of strike water to **57.4C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **15 min** at **67C**
- Keep mash **50 min** at **72C**
- Sparge using **24 liter(s)** of **76C** water or to achieve **34 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount          | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.5 kg (49.5%)  | 80 %  | 5   |
| Grain | Płatki pszeniczne    | 0.75 kg (14.9%) | 60 %  | 3   |
| Grain | Płatki owsiane       | 0.75 kg (14.9%) | 60 %  | 3   |
| Grain | Bestmalz Carmel Pils | 0.75 kg (14.9%) | 75 %  | 5   |
| Grain | Viking Malt Żytni    | 0.3 kg (5.9%)   | 85 %  | 7   |

## Hops

| Use for             | Name    | Amount | Time      | Alpha acid |
|---------------------|---------|--------|-----------|------------|
| Boil                | Citra   | 15 g   | 40 min    | 13.6 %     |
| Aroma (end of boil) | Citra   | 75 g   | 1 min     | 13.6 %     |
| Dry Hop             | Citra   | 60 g   | 7 day(s)  | 13.6 %     |
| Dry Hop             | Mosaic  | 75 g   | 12 day(s) | 11.8 %     |
| Dry Hop             | Equinox | 75 g   | 7 day(s)  | 12.2 %     |

## Yeasts

| Name                  | Type | Form   | Amount | Laboratory |
|-----------------------|------|--------|--------|------------|
| WLP067 - Coastal Haze | Ale  | Liquid | 70 ml  | White Labs |

## Extras

| Type        | Name                 | Amount | Use for | Time  |
|-------------|----------------------|--------|---------|-------|
| Water Agent | Gips piwowarski      | 4 g    | Mash    | 0 min |
| Water Agent | Chlorek wapnia (95%) | 3.33 g | Mash    | 0 min |