

# Panipanii

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **47**
- SRM **4.3**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **39.4 liter(s)**
- Total mash volume **48.2 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **39.4 liter(s)** of strike water to **73.3C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount          | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4.56 kg (52.1%) | 80 %  | 5   |
| Grain | Pszeniczny           | 2.88 kg (32.9%) | 85 %  | 4   |
| Grain | Płatki pszeniczne    | 0.66 kg (7.5%)  | 80 %  | 3   |
| Grain | Płatki owsiane       | 0.66 kg (7.5%)  | 80 %  | 3   |

## Hops

| Use for | Name     | Amount | Time     | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil    | Citra    | 32.6 g | 60 min   | 12 %       |
| Boil    | Perle    | 32.6 g | 10 min   | 7 %        |
| Boil    | Mosaic   | 32.6 g | 10 min   | 10 %       |
| Boil    | Amarillo | 32.6 g | 10 min   | 9.5 %      |
| Dry Hop | Mosaic   | 65.2 g | 3 day(s) | 10 %       |
| Dry Hop | Amarillo | 65.2 g | 3 day(s) | 9.5 %      |

## Yeasts

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