

# Sesja

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **43**
- SRM **3.9**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **15.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Pilzneński           | 3 kg (57.7%)  | 81 %  | 4   |
| Grain | Płatki owsiane       | 0.2 kg (3.8%) | 85 %  | 3   |
| Grain | Viking Pale Ale malt | 2 kg (38.5%)  | 80 %  | 5   |

## Hops

| Use for             | Name           | Amount | Time     | Alpha acid |
|---------------------|----------------|--------|----------|------------|
| Boil                | Motueka        | 30 g   | 45 min   | 7 %        |
| Boil                | Southern Cross | 15 g   | 25 min   | 12 %       |
| Aroma (end of boil) | Southern Cross | 15 g   | 10 min   | 12 %       |
| Aroma (end of boil) | WAI-ITI        | 15 g   | 10 min   | 4.1 %      |
| Dry Hop             | Motueka        | 30 g   | 7 day(s) | 7 %        |
| Dry Hop             | WAI-ITI        | 15 g   | 7 day(s) | 4.1 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11 g   | Fermentis  |