

# Początek

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **35**
- SRM **4.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **17 liter(s)** of strike water to **73.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount      | Yield | EBC |
|-------|----------------------|-------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (100%) | 80 %  | 5   |

## Hops

| Use for             | Name  | Amount | Time     | Alpha acid |
|---------------------|-------|--------|----------|------------|
| Boil                | Citra | 15 g   | 60 min   | 12.9 %     |
| Boil                | Citra | 8 g    | 25 min   | 12.9 %     |
| Aroma (end of boil) | Citra | 20 g   | 5 min    | 12.9 %     |
| Dry Hop             | Citra | 30 g   | 7 day(s) | 12.9 %     |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US 05 | Ale  | Dry  | 9 g    | ---        |