

# CITRUS JUICE

- Gravity **14 BLG**
- ABV ---
- IBU **64**
- SRM **4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **69 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **10 min** at **76C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (66.7%)  | 80 %  | 5   |
| Grain | Cara-Pils/Dextrine   | 0.5 kg (8.3%) | 72 %  | 4   |
| Grain | Płatki pszeniczne    | 0.5 kg (8.3%) | 85 %  | 3   |
| Grain | Płatki owsiane       | 0.5 kg (8.3%) | 85 %  | 3   |
| Grain | Pszeniczny           | 0.5 kg (8.3%) | 85 %  | 4   |

## Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Galaxy     | 10 g   | 60 min | 15 %       |
| Boil    | Citra      | 15 g   | 30 min | 13.5 %     |
| Boil    | Cascade    | 10 g   | 20 min | 7.7 %      |
| Boil    | Centennial | 10 g   | 15 min | 8.5 %      |
| Boil    | Motueka    | 25 g   | 15 min | 7 %        |
| Boil    | Cascade    | 10 g   | 10 min | 7.7 %      |
| Boil    | Citra      | 10 g   | 10 min | 13.5 %     |
| Boil    | Galaxy     | 20 g   | 5 min  | 15 %       |
| Boil    | Centennial | 20 g   | 5 min  | 8.5 %      |
| Boil    | Cascade    | 10 g   | 5 min  | 7.7 %      |

|           |            |      |       |        |
|-----------|------------|------|-------|--------|
| Boil      | Citra      | 15 g | 5 min | 13.5 % |
| Whirlpool | Citra      | 20 g | 0 min | 13.5 % |
| Whirlpool | Centennial | 20 g | 0 min | 8.5 %  |
| Whirlpool | Cascade    | 20 g | 0 min | 7.7 %  |
| Whirlpool | Galaxy     | 20 g | 0 min | 15 %   |
| Whirlpool | Motueka    | 25 g | 0 min | 7 %    |

## Yeasts

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