

## #41

- Gravity **11.9 BLG**
- ABV ---
- IBU **31**
- SRM **5.4**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **20.7 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **14.8 liter(s)**
- Total mash volume **18.5 liter(s)**

### Steps

- Temp **67.5 C**, Time **60 min**

### Mash step by step

- Heat up **14.8 liter(s)** of strike water to **73.4C**
- Add grains
- Keep mash **60 min** at **67.5C**
- Sparge using **9.6 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.2 kg (86.5%) | 80 %  | 5   |
| Grain | Carahell             | 0.5 kg (13.5%) | 77 %  | 26  |

### Hops

| Use for             | Name    | Amount | Time     | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil                | Iunga   | 12 g   | 45 min   | 11.6 %     |
| Aroma (end of boil) | Marynka | 20 g   | 10 min   | 10 %       |
| Dry Hop             | Citra   | 30 g   | 5 day(s) | 12 %       |
| Dry Hop             | Cascade | 20 g   | 5 day(s) | 6 %        |

### Yeasts

| Name                   | Type | Form | Amount | Laboratory |
|------------------------|------|------|--------|------------|
| Safale US-05 - starter | Ale  | Dry  | 500 g  | Fermentis  |