

# Pale Ale

---

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **31**
- 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 **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

## Steps

- Temp **44 C**, Time **15 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **15 min** at **44C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount          | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Viking Wheat Malt    | 1.45 kg (27.6%) | 83 %  | 5   |
| Grain | Viking Pilsner malt  | 1.2 kg (22.9%)  | 82 %  | 4   |
| Grain | Viking Pale Ale malt | 2.6 kg (49.5%)  | 80 %  | 5   |

## Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | Marynka | 15 g   | 60 min | 10 %       |
| Boil                | Iunga   | 12 g   | 60 min | 11 %       |
| Aroma (end of boil) | Wai-iti | 10 g   | 15 min | 4.1 %      |

## Yeasts

| Name  | Type  | Form  | Amount | Laboratory |
|-------|-------|-------|--------|------------|
| Wb-06 | Wheat | Slant | 200 ml | Fermentis  |

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |                |     |      |       |
|--------|----------------|-----|------|-------|
| Fining | Mech irlandzki | 5 g | Boil | 5 min |
|--------|----------------|-----|------|-------|