

# Simple Pale Ale

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **29**
- SRM **12.6**
- 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 **6 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **35 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **30 liter(s)** of strike water to **54.7C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **0.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount     | Yield | EBC |
|-------|----------------------|------------|-------|-----|
| Grain | Viking Munich Malt   | 4 kg (80%) | 78 %  | 22  |
| Grain | Viking Pale Ale malt | 1 kg (20%) | 80 %  | 70  |

## Hops

| Use for | Name            | Amount | Time   | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil    | Cascade PL      | 50 g   | 20 min | 5.2 %      |
| Boil    | Styrian Golding | 50 g   | 20 min | 3.6 %      |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11 g   | Fermentis  |