

# AMERICAN PALE ALE

---

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **40**
- SRM **4.4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **15 %**
- Size with trub loss **18 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.5 liter(s)**
- Total mash volume **19.3 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **68 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **14.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **22.3 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3 kg (62.1%)   | 80 %  | 5   |
| Grain | Viking Wheat Malt    | 0.5 kg (10.4%) | 83 %  | 5   |
| Grain | Viking Vienna Malt   | 0.5 kg (10.4%) | 79 %  | 7   |
| Grain | Oats, Flaked         | 0.58 kg (12%)  | 60 %  | 2   |
| Grain | Carabody             | 0.25 kg (5.2%) | 75 %  | 8   |

## Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Columbus | 15 g   | 60 min   | 13.6 %     |
| Boil                | Amarillo | 25 g   | 10 min   | 9.5 %      |
| Aroma (end of boil) | Amarillo | 25 g   | 5 min    | 9.5 %      |
| Aroma (end of boil) | Idaho 7  | 25 g   | 0 min    | 12.3 %     |
| Dry Hop             | Amarillo | 50 g   | 3 day(s) | 9.5 %      |
| Dry Hop             | Strata   | 50 g   | 3 day(s) | 13.3 %     |
| Dry Hop             | Idaho 7  | 25 g   | 3 day(s) | 12.3 %     |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale  | Dry  | 11.5 g | ---        |

### Extras

| Type        | Name             | Amount | Use for | Time   |
|-------------|------------------|--------|---------|--------|
| Fining      | Whirlfloc        | 1 g    | Boil    | 5 min  |
| Water Agent | Siarczan magnezu | 1 g    | Boil    | 60 min |
| Water Agent | Chlorek wapnia   | 6 g    | Boil    | 60 min |

### Notes

- 5ml kwasu do zacierania  
14°/ ~40IBU  
Nov 30, 2024, 9:29 PM