

# African Pale Ale

---

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **40**
- SRM **5.6**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **25.7 liter(s)**
- Total mash volume **33.1 liter(s)**

## Steps

- Temp **66 C**, Time **75 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **25.7 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **75 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount         | Yield  | EBC |
|-------|------------------------|----------------|--------|-----|
| Grain | Simpsons - Maris Otter | 2 kg (27.2%)   | 80 %   | 6   |
| Grain | Pilzneński             | 2 kg (27.2%)   | 81 %   | 3   |
| Grain | Monachijski            | 1 kg (13.6%)   | 80 %   | 25  |
| Grain | Pszeniczny             | 1 kg (13.6%)   | 82 %   | 5   |
| Grain | Briess - Carapils Malt | 0.5 kg (6.8%)  | 75 %   | 5   |
| Grain | Słód owsiany Fawcett   | 0.5 kg (6.8%)  | 78.5 % | 5   |
| Grain | Acid Malt              | 0.35 kg (4.8%) | --- %  | 4.5 |

## Hops

| Use for | Name             | Amount | Time     | Alpha acid |
|---------|------------------|--------|----------|------------|
| Boil    | Southern Star    | 15 g   | 60 min   | 15.8 %     |
| Boil    | Southern Star    | 10 g   | 30 min   | 15.8 %     |
| Boil    | Southern Passion | 15 g   | 20 min   | 11.7 %     |
| Boil    | Southern Passion | 15 g   | 5 min    | 11.7 %     |
| Boil    | Southern Star    | 25 g   | 0 min    | 15.8 %     |
| Dry Hop | Southern Passion | 20 g   | 4 day(s) | 11.7 %     |
| Dry Hop | Southern Passion | 50 g   | 4 day(s) | 11.7 %     |

|         |               |      |          |        |
|---------|---------------|------|----------|--------|
| Dry Hop | Southern Star | 50 g | 4 day(s) | 15.8 % |
|---------|---------------|------|----------|--------|

### Yeasts

| Name                                 | Type | Form | Amount | Laboratory      |
|--------------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M36 Liberty Bell Ale | Ale  | Dry  | 10 g   | Mangrove Jack's |

### Extras

| Type        | Name                | Amount | Use for | Time   |
|-------------|---------------------|--------|---------|--------|
| Water Agent | Gips piwowarski     | 2.5 g  | Mash    | 75 min |
| Fining      | Mech Irlandzki      | 7 g    | Boil    | 15 min |
| Other       | Pożywka dla drożdży | 3 g    | Boil    | 15 min |