

# Hazy Africa

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **38**
- SRM **5.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **13 %/h**
- Boil size **17.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.8 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **71 C**, Time **20 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **9.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **20 min** at **71C**
- Keep mash **10 min** at **77C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **17.6 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount          | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 1.5 kg (46.9%)  | 80 %  | 5   |
| Grain | Biscuit Malt         | 0.2 kg (6.3%)   | 79 %  | 45  |
| Grain | Płatki owsiane       | 0.75 kg (23.4%) | 85 %  | 3   |
| Grain | Żytni                | 0.75 kg (23.4%) | 85 %  | 8   |

## Hops

| Use for   | Name             | Amount | Time     | Alpha acid |
|-----------|------------------|--------|----------|------------|
| Boil      | Southern Star    | 10 g   | 20 min   | 15.8 %     |
| Boil      | Southern Promise | 10 g   | 20 min   | 11.1 %     |
| Boil      | Southern Passion | 10 g   | 20 min   | 11.1 %     |
| Whirlpool | Southern Star    | 10 g   | 0 min    | 15.8 %     |
| Whirlpool | Southern Promise | 10 g   | 0 min    | 11.1 %     |
| Whirlpool | Southern Passion | 10 g   | 0 min    | 11.1 %     |
| Dry Hop   | Southern Star    | 30 g   | 3 day(s) | 15.8 %     |
| Dry Hop   | Southern Promise | 30 g   | 3 day(s) | 11.1 %     |
| Dry Hop   | Southern Passion | 30 g   | 3 day(s) | 11.1 %     |

## Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

| <b>Name</b> | <b>Type</b> | <b>Form</b> | <b>Amount</b> | <b>Laboratory</b> |
|-------------|-------------|-------------|---------------|-------------------|
| Safale S-04 | Ale         | Slant       | 100 ml        | Safale            |