

African Pale Ale

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **24**
- SRM **5.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **20.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.1 liter(s)**
- Total mash volume **16.9 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **13.1 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|-----------------|-------|-----|
| Grain | Pale Ale Mep | 3.25 kg (86.7%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ I | 0.2 kg (5.3%) | 79 % | 16 |
| Grain | Strzegom Karmel 150 | 0.1 kg (2.7%) | 75 % | 150 |
| Grain | Żytni | 0.2 kg (5.3%) | 85 % | 8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-------------------|------------------|--------|----------|------------|
| Boil | Southern Passion | 10 g | 50 min | 11.7 % |
| Boil | U3/132 | 10 g | 5 min | 17.9 % |
| Boil | African Queen | 10 g | 5 min | 13.5 % |
| Whirlpool | Southern Passion | 20 g | --- | 11.7 % |
| Hopstand 15-20min | | | | |
| Whirlpool | U3/132 | 20 g | --- | 17.9 % |
| Hopstand 15-20min | | | | |
| Whirlpool | African Queen | 20 g | --- | 13.5 % |
| Hopstand 15-20min | | | | |
| Dry Hop | Southern Passion | 20 g | 2 day(s) | 11.7 % |

| | | | | |
|---------|---------------|------|----------|--------|
| Dry Hop | U3/132 | 20 g | 2 day(s) | 17.9 % |
| Dry Hop | African Queen | 20 g | 2 day(s) | 13.5 % |

Yeasts

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