

# 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	---