

# Afro

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **37**
- SRM **21.8**
- Style **American Brown Ale**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **18 liter(s)**
- Boil time **90 min**
- Evaporation rate **7 %/h**
- Boil size **22.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **13.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **22.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (81.6%)	80 %	5
Grain	Strzegom Karmel 150	0.1 kg (2%)	75 %	150
Grain	Strzegom Karmel 600	0.1 kg (2%)	68 %	601
Grain	Fawcett - Pszeniczny Czekoladowy	0.1 kg (2%)	73 %	1001
Grain	Strzegom Czekoladowy ciemny	0.1 kg (2%)	68 %	1200
Grain	Płatki orkiszowe	0.2 kg (4.1%)	80 %	4
Adjunct	Pszenica niesłodowana	0.3 kg (6.1%)	75 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	25 g	15 min	12 %
Boil	Simcoe	25 g	15 min	13.2 %
Dry Hop	Simcoe	50 g	1 day(s)	13.2 %

Dry Hop	Mosaic	25 g	1 day(s)	10 %
Dry Hop	Citra	25 g	1 day(s)	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Us-05	Ale	Dry	11.5 g	---

### Notes

- Fermentacja 16 stopni.  
*Mar 1, 2020, 1:04 PM*