

# Baraki Obamy

- Gravity **14.4 BLG**
- ABV ---
- IBU **73**
- SRM **31.6**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **21.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

## Steps

- Temp **52 C**, Time **20 min**
- Temp **62 C**, Time **35 min**
- Temp **72 C**, Time **20 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **17.1 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **35 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **27.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (70.2%)	79 %	6
Grain	Pilzneński	0.8 kg (14%)	81 %	4
Grain	Carafa	0.1 kg (1.8%)	70 %	664
Grain	Carafa II	0.25 kg (4.4%)	70 %	812
Grain	Jęczmień palony	0.05 kg (0.9%)	55 %	985
Grain	Carabelge	0.2 kg (3.5%)	74 %	35
Grain	Strzegom Karmel 150	0.3 kg (5.3%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	30 g	60 min	12 %
Boil	Citra	20 g	30 min	12 %
Boil	Mosaic	30 g	15 min	12 %
Dry Hop	Mosaic	50 g	---	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale