

# Rio Bravo

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **36**
- SRM **3.5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

## Steps

- Temp **68 C**, Time **95 min**

## Mash step by step

- Heat up **14.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **95 min** at **68C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilżeński Malteurop	4 kg (81.6%)	80 %	4
Grain	Słód pszeniczny Bestmalz	0.5 kg (10.2%)	82 %	5
Grain	Płatki żytnie	0.3 kg (6.1%)	--- %	---
Grain	Płatki owsiane	0.1 kg (2%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bravo	20 g	60 min	14.4 %
Aroma (end of boil)	Mosaic	30 g	1 min	11.5 %
Aroma (end of boil)	Bravo	30 g	1 min	14.4 %
Dry Hop	Bravo	20 g	3 day(s)	14.4 %
Dry Hop	Mosaic	20 g	3 day(s)	11.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Dry	10 g	Mangrove Jack's