

# Bez Pale Ale z Mango

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **63**
- SRM **4.5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **65 C**, Time **45 min**
- Temp **76 C**, Time **15 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **76C**
- Sparge using **19.5 liter(s)** of **76C** water or to achieve **31.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (83.3%)	79 %	6
Grain	Strzegom Pszeniczny	1 kg (16.7%)	81 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	50 g	60 min	13 %
Boil	Cascade	20 g	20 min	6 %
Dry Hop	Chinook	50 g	7 day(s)	13 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	Mango - pulpa	1700 g	Secondary	7 day(s)