

# Bawarskie Mandarynki - Mandarina Bavaria Pale Ale

- Gravity **12.1 BLG**
- ABV ---
- IBU **33**
- SRM **4.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **5 min** at **78C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Colorado Pale Base Malt	4 kg (81.6%)	80 %	6
Grain	Bestmalz Carmel Pils	0.5 kg (10.2%)	75 %	5
Adjunct	Płatki owsiane	0.4 kg (8.2%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mandarina Bavaria	35 g	60 min	8.9 %
Whirlpool	Mandarina Bavaria	65 g	0 min	8.9 %
Dry Hop	Mandarina Bavaria	200 g	5 day(s)	8.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Finings	Mech Irlandzki	5 g	Boil	15 min