

# Mandarynkowa IPA v.3

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- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **55**
- SRM **4.7**
- 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 **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.8 liter(s)**

## Steps

- Temp **62 C**, Time **20 min**
- Temp **70 C**, Time **40 min**

## Mash step by step

- Heat up **20.1 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **70C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (67.2%)	80 %	5
Grain	Płatki owsiane	2 kg (29.9%)	85 %	3
Grain	Płatki pszeniczne	0.2 kg (3%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	25 g	60 min	15.5 %
Boil	Mandarina Bavaria	20 g	15 min	7.6 %
Boil	Centennial	20 g	15 min	10.5 %
Whirlpool	Mandarina Bavaria	40 g	0 min	7.6 %
Whirlpool	Centennial	40 g	0 min	10.5 %
Dry Hop	Mandarina Bavaria	100 g	2 day(s)	7.6 %
Dry Hop	Centennial	100 g	2 day(s)	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - London Ale III	Ale	Liquid	125 ml	Wyeast Labs

## Extras

Type	Name	Amount	Use for	Time
Spice	Sok mandarynkowy	1000 g	Secondary	10 day(s)
Spice	Sok ananasowy	1000 g	Secondary	10 day(s)