

# Od Mistrza

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **30**
- SRM **3.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **8.4 liter(s)**
- Total mash volume **10.8 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **75 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **8.4 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **75C**
- Keep mash **1 min** at **78C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **14.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.4 kg (93.8%)	80 %	5
Adjunct	Płatki owsiane	0.16 kg (6.3%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bravo	6 g	60 min	15.5 %
Boil	Mosaic	6 g	50 min	10 %
Whirlpool	Citra	4.8 g	0 min	12 %
Whirlpool	Mosaic	4.4 g	0 min	10 %
Dry Hop	Mosaic	4.4 g	4 day(s)	10 %
Dry Hop	Citra	4.8 g	4 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Slant	100 ml	Fermentum Mobile