

# single mandarina wheat ale

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- Gravity **10 BLG**
- ABV **4 %**
- IBU **21**
- SRM **3.2**
- Style **American Wheat or Rye Beer**

## 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 **12 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (37.5%)	80 %	5
Grain	Pszeniczny	2.5 kg (62.5%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	5 g	60 min	12.8 %
Boil	Mandarina Bavaria	10 g	25 min	9.8 %
Boil	Mandarina Bavaria	15 g	10 min	9.8 %
Aroma (end of boil)	Mandarina Bavaria	25 g	0 min	9.8 %
Whirlpool	Mandarina Bavaria	35 g	30 min	9.8 %
Dry Hop	Mandarina Bavaria	65 g	6 day(s)	9.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	300 ml	Fermentis

## Notes

- 10.5 blg - 2 blg  
zabutelkowano 30.05.2017  
dodano 4gr glukozy na 0,5l  
czerwony k.  
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