

# Czynnik pomarańczowy

- Gravity **11.4 BLG**
- ABV ---
- IBU **51**
- SRM **8**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **29.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **19.5 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (60%)	80 %	5
Grain	Strzegom Monachijski typ I	1 kg (20%)	79 %	16
Grain	Viking melanoidynowy	1 kg (20%)	75 %	60

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	20 g	60 min	12 %
Boil	Chinook	20 g	30 min	13 %
Aroma (end of boil)	Cascade	20 g	20 min	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	Skórka pomarańczowa	25 g	Boil	30 min

Flavor	Skórka z mandarynek	25 g	Boil	30 min
Flavor	Sok z pomarańczy	500 g	Boil	30 min
Flavor	Sok z mandarynek	500 g	Boil	30 min