

### 3 pomarańcze z czereśnią

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **39**
- SRM **4.6**
- Style **White IPA**

#### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **30.6 liter(s)**

#### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

#### Steps

- Temp **62 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

#### Mash step by step

- Heat up **20.4 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **15 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **30.6 liter(s)** of wort

#### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Płatki owsiane	0.4 kg (5.9%)	85 %	3
Grain	Płatki pszeniczne	0.4 kg (5.9%)	85 %	3
Grain	Viking Malt Wędzony Czereśnią	1 kg (14.7%)	82 %	10
Grain	Słód pszeniczny Viking Malt	3.5 kg (51.5%)	82 %	5
Grain	Słód pilzński Viking Malt	1.5 kg (22.1%)	80 %	4

#### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	2 g	60 min	9.5 %
Boil	Citra	2 g	60 min	12 %
Boil	Mosaic	2 g	60 min	10 %
Boil	Amarillo	10 g	30 min	9.5 %
Boil	Citra	10 g	30 min	12 %
Boil	Mosaic	10 g	30 min	10 %
Boil	Amarillo	10 g	15 min	9.5 %

Boil	Citra	10 g	15 min	12 %
Boil	Mosaic	10 g	15 min	10 %
Aroma (end of boil)	Amarillo	10 g	0 min	9.5 %
Aroma (end of boil)	Citra	10 g	0 min	12 %
Aroma (end of boil)	Mosaic	10 g	0 min	10 %
Dry Hop	Amarillo	18 g	5 day(s)	9.5 %
Dry Hop	Citra	18 g	5 day(s)	12 %
Dry Hop	Mosaic	18 g	5 day(s)	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	700 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Spice	curacao	15 g	Boil	10 min
Flavor	Czereśnia gorzka	100 g	Secondary	4 day(s)