

# Masz poczęstuj się

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **20**
- SRM **4.2**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

## Steps

- Temp **62 C**, Time **80 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **14.3 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **80 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (52.2%)	85 %	7
Grain	Cara-Pils/Dextrine	0.5 kg (8.7%)	72 %	4
Grain	Pszeniczny	0.5 kg (8.7%)	85 %	4
Grain	Płatki owsiane	0.75 kg (13%)	85 %	3
Sugar	Milk Sugar (Lactose)	1 kg (17.4%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	15 g	60 min	12 %
Aroma (end of boil)	Mosaic	15 g	5 min	10 %
Aroma (end of boil)	Citra	15 g	0 min	12 %
Whirlpool	Mosaic	35 g	0 min	10 %
Whirlpool	Citra	20 g	0 min	12 %
Dry Hop	Citra	50 g	3 day(s)	12 %
Dry Hop	Mosaic	50 g	3 day(s)	10 %
Whirlpool	Columbus/Tomahawk/Zeus	25 g	0 min	15.5 %

Dry Hop	Centennial	25 g	1 day(s)	10.5 %
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### Yeasts

Name	Type	Form	Amount	Laboratory
US 05	Ale	Culture	1000 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Spice	Skórka pomarańczy curacao	20 g	Boil	10 min
Flavor	Sok wyciskany z pomarańczy	2000 g	Secondary	5 day(s)