

## Bez żadnego trybu

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **62**
- SRM **5.1**
- Style **American IPA**

### 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

### Steps

- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **21.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **40 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	2.5 kg (35.2%)	81 %	5
Grain	Weyermann - Pale Ale Malt	2.2 kg (31%)	85 %	7
Grain	Płatki owsiane	1 kg (14.1%)	85 %	3
Grain	Płatki pszeniczne	1 kg (14.1%)	60 %	3
Grain	Płatki jęczmienne	0.4 kg (5.6%)	80 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Cascade	10 g	60 min	5.8 %
Aroma (end of boil)	Cascade	40 g	15 min	5.8 %
Whirlpool	Citra	50 g	20 min	12.6 %
Whirlpool	Nelson Sauvín	50 g	20 min	10.1 %
Whirlpool	Simcoe	50 g	20 min	13.3 %
Dry Hop	Galaxy	50 g	3 day(s)	16.2 %
Dry Hop	Nelson Sauvín	50 g	3 day(s)	10.1 %
Dry Hop	Citra	50 g	3 day(s)	12.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP067 - Coastal Haze	Ale	Slant	200 ml	White Labs