

# Ne ipa Czarek

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **43**
- SRM **5**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **1 %**
- Size with trub loss **24.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **28.8 liter(s)**

## Steps

- Temp **69 C**, Time **5 min**
- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **21.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **5 min** at **69C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.2 kg (44.4%)	79 %	6
Grain	Strzegom Pszeniczny	1.5 kg (20.8%)	81 %	6
Grain	Żytni	0.5 kg (6.9%)	85 %	8
Grain	Rice, Flaked	0.8 kg (11.1%)	70 %	2
Grain	Barley, Flaked	0.4 kg (5.6%)	70 %	4
Grain	Oats, Flaked	0.8 kg (11.1%)	80 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	30 min	13 %
Boil	Centennial	15 g	10 min	10.5 %
Boil	Centennial	15 g	10 min	10.5 %
Aroma (end of boil)	Centennial	30 g	5 min	10.5 %
Aroma (end of boil)	Chinook	15 g	5 min	13 %
Whirlpool	Centennial	30 g	0 min	10.5 %
Whirlpool	Chinook	15 g	0 min	13 %

Dry Hop	Mosaic	100 g	3 day(s)	10 %
Dry Hop	Columbus/Tomahawk/Zeus	100 g	3 day(s)	15.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Hazy Daze 2	Ale	Liquid	300 ml	Fermentis