

# Czarna Ipa

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- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **61**
- SRM **33.1**
- Style **Black 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 **19.4 liter(s)**
- Total mash volume **25.8 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **19.4 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (73.5%)	79 %	6
Grain	Fawcett - Crystal	0.45 kg (6.6%)	70 %	160
Grain	Weyermann - Carafa II	0.5 kg (7.4%)	70 %	837
Grain	Special Roast	0.25 kg (3.7%)	72 %	99
Grain	Fawcett - Pale Chocolate	0.25 kg (3.7%)	71 %	600
Adjunct	Płatki owsiane	0.25 kg (3.7%)	85 %	3
Sugar	Cukier trzcinowy	0.1 kg (1.5%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	35 g	45 min	15.5 %
Boil	Simcoe	35 g	10 min	13.2 %
Aroma (end of boil)	Citra	25 g	0 min	12 %
Dry Hop	Citra	50 g	5 day(s)	12 %
Dry Hop	Mosaic	50 g	3 day(s)	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	10 g	Fermentis

## Notes

- Słody ciemne na koniec zacierania, cukier na koniec gotowania. Fermentacja 1 tydzień burzliwej 19°, 1 tydzień cichej 19°, 1 tydzień cichej 12-15°.  
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