

# Czerniak

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **61**
- SRM **36.3**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.1 liter(s)**
- Total mash volume **24.2 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **18.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **78C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann pszeniczny jasny	0.2 kg (3.1%)	82 %	4
Grain	Strzegom Pale Ale	5 kg (78.7%)	79 %	6
Grain	Briess - Special Roast Malt	0.25 kg (3.9%)	72 %	95
Grain	Słód Caramunich Typ II Weyermann	0.1 kg (1.6%)	73 %	120
Grain	Weyermann - Carafa II Special	0.5 kg (7.9%)	70 %	1150
Sugar	Brown Sugar, Dark	0.3 kg (4.7%)	100 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	50 g	60 min	9.4 %
Boil	Cascade	25 g	20 min	7.1 %
Boil	Willamette	30 g	10 min	5 %
Aroma (end of boil)	Cascade	33 g	0 min	7.1 %
Dry Hop	Cascade	45 g	3 day(s)	7.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Spice	Brązowy cukier	0.3 g	Boil	5 min

### Notes

- Weyermann - Carafa II przy podnoszeniu na mashout  
Cukier 5 min przed końcem gotowania

60 min - 66-67°C

->78°C

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