

# Czarny ipa

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **63**
- SRM **51.8**
- Style **Black 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 **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **18.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.1 kg (50.8%)	80 %	5
Grain	Pilzneński	1 kg (16.4%)	81 %	4
Grain	Strzegom Monachijski typ II	1 kg (16.4%)	79 %	22
Grain	Strzegom Barwiący	1 kg (16.4%)	68 %	1300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Sybilla	30 g	30 min	3.5 %
Boil	Chinook	30 g	20 min	13 %
Aroma (end of boil)	Ctz	50 g	0 min	15.8 %
Aroma (end of boil)	Marynka	50 g	0 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Us-05	Ale	Dry	11.5 g	Fermentis