

# Czarna IPKA

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **66**
- SRM **35.3**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **28.9 liter(s)**

## Steps

- Temp **62 C**, Time **55 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **7 min**

## Mash step by step

- Heat up **22 liter(s)** of strike water to **68.6C**
- Add grains
- Keep mash **55 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **7 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (72.6%)	80 %	5
Grain	Pilznieński	1 kg (14.5%)	81 %	4
Grain	obłuszczoney	0.585 kg (8.5%)	73 %	1300
Grain	Strzegom Karmel 300	0.3 kg (4.4%)	70 %	299

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	15.5 %
Boil	Chinook	30 g	20 min	13 %
Boil	Lublin (Lubelski)	40 g	10 min	4 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
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Fining	mech irlandzki	10 g	Boil	10 min
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