

# Black IPA

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **52**
- SRM **35.6**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.9 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25.3 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **18.8 liter(s)** of strike water to **76.3C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (72.5%)	85 %	7
Grain	Weyermann - Carapils	0.5 kg (7.2%)	78 %	4
Grain	Cara Crystal Castle Malting 150 EBC	0.5 kg (7.2%)	78 %	150
Grain	Carafa III 1300-1500 EBC	0.5 kg (7.2%)	70 %	1400
Adjunct	płatki jęczmienne	0.4 kg (5.8%)	70 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	30 g	60 min	10.5 %
Aroma (end of boil)	Citra	30 g	15 min	12 %
Whirlpool	Amarillo	30 g	30 min	9.5 %
Dry Hop	Citra	60 g	3 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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FM54 Gorączka kalifornijska	Ale	Liquid	30 ml	Fermentum Mobile
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### Extras

Type	Name	Amount	Use for	Time
Water Agent	kwas mlekowy	1 g	Boil	1 min
Fining	mech irlandzki	5 g	Boil	10 min
Fining	kwask askorbinowy - wit.C	4 g	Bottling	---

### Notes

- 22 litry brzezki nastawnej burzliwa 15 dni (ok 20 st.C)  
cicha 15 dni (ok 20 st.C)  
16,5blg początkowe / (FFT=5,2blg) /5,0 końcowe (inny balingomierz)  
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- [https://drive.google.com/open?id=1zGvKrJ3Cr4vhgXwF0zi5\\_Av9CMYIBDwT](https://drive.google.com/open?id=1zGvKrJ3Cr4vhgXwF0zi5_Av9CMYIBDwT)  
<https://drive.google.com/open?id=1HZP1c6tv9-SINCXpC3IMUfLXkrQiLO3P>  
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