

## Black IPA 2

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **85**
- SRM **19.6**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **13.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.9 liter(s)**
- Total mash volume **9.2 liter(s)**

### Steps

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

### Mash step by step

- Heat up **6.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Caramel/Crystal Malt - 10L	0.17 kg (6.7%)	75 %	20
Grain	Pale Malt (2 Row) US	2 kg (78.4%)	79 %	4
Grain	carafa special II	0.13 kg (5.1%)	75 %	1150
Sugar	cukier brazowy	0.25 kg (9.8%)	100 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	10 %
Boil	Willamette	15 g	15 min	5 %
Boil	Cascade	15 g	45 min	6 %
Boil	Cascade	15 g	1 min	6 %
Boil	Equinox	10 g	60 min	13.1 %
Boil	Equinox	5 g	1 min	13.1 %
Dry Hop	Cascade	30 g	4 day(s)	6 %
Dry Hop	Equinox	30 g	4 day(s)	13.1 %
Dry Hop	Willamette	30 g	4 day(s)	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Dry	5.5 g	Fermentis
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## Notes

- Zacieranie:  
Zacieramy jedynie jasne słydy. Suchą Carafe II dodajemy po zatarciu, do wystądzania.  
*Feb 13, 2019, 10:11 PM*
- Gotowanie:  
Cukier dodajemy w ostatniej minucie.  
*Feb 13, 2019, 10:11 PM*
- Ferm. burz. 7 dni w temp. 18-20 C.  
Ferm. cicha 10 dni w temp. 14-16 C, na ostatnie 4 dni chmiel.  
Refermentacja 14 dni w temp. 19-21 C.  
*Feb 13, 2019, 10:18 PM*