

# BLACK IPA 2021

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- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **66**
- SRM **22.4**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **30 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.9 liter(s)**
- Total mash volume **32 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **15 min**

## Mash step by step

- Heat up **24.9 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **76C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **30 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	6 kg (84.5%)	85 %	7
Grain	Strzegom Pszeniczny	0.4 kg (5.6%)	81 %	6
Grain	Carahell	0.3 kg (4.2%)	77 %	26
Grain	Palony jęczmień Weyermann	0.4 kg (5.6%)	1 %	1000

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	lunga	30 g	60 min	9.4 %
Boil	Cascade	15 g	20 min	7.8 %
Boil	Citra	15 g	20 min	12.9 %
Boil	Simcoe	15 g	20 min	14.5 %
Boil	Cascade	15 g	7 min	7.8 %
Boil	Citra	15 g	7 min	12.9 %
Boil	Simcoe	15 g	7 min	14.5 %
Boil	mosaic	15 g	7 min	10.5 %
Aroma (end of boil)	Cascade	15 g	0 min	7.8 %
Aroma (end of boil)	citra	20 g	0 min	13.2 %

Aroma (end of boil)	Simcoe	20 g	0 min	14.5 %
Aroma (end of boil)	Cascade	30 g	0 min	7.8 %
Aroma (end of boil)	mosaic	20 g	0 min	10.5 %
Dry Hop	citra	30 g	4 day(s)	13.2 %
Dry Hop	mosaic	30 g	4 day(s)	10.5 %
Dry Hop	Simcoe	30 g	4 day(s)	13.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
us - 05	Ale	Slant	200 ml	---

### Extras

Type	Name	Amount	Use for	Time
Fining	whirlfloc t	1 g	Boil	10 min