

## Black IPA 4.0

---

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **62**
- SRM **22.3**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.8 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.9 liter(s)**
- Total mash volume **19.1 liter(s)**

### Steps

- Temp **69 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **14.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **5 min** at **78C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4 kg (94.1%)	85 %	7
Grain	Weyermann - Carafa III Special	0.25 kg (5.9%)	70 %	1024

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Simcoe 2018	25 g	60 min	13.2 %
Boil	Simcoe 2019	25 g	10 min	13.2 %
Whirlpool	Simcoe 2019	50 g	0 min	13.2 %
Whirlpool	Amarillo	50 g	0 min	9.5 %
Whirlpool	Chinook	50 g	0 min	12 %
Dry Hop	Twisted Fruitbomb Blend	0.75 g	2 day(s)	14.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	150 ml	Fermentum Mobile

### Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	3 g	Boil	10 min
Water Agent	Pożywka GF	1 g	Primary	0 day(s)